ATTRIBUTION OF BASE CIVIL ENGINEERING LEADERSHIP BY WING AND BASE COMMANDERS

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2

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THESIS

:ed to the Faculty of the School of Systems and Logistics

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Requirements for the Degree of

Master of Science in Engineering Management

Jerry P. Haenisch B.S.

Captain, USAF

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Preface

This study determined how wing and base commanders define leadership behavior for their subordinate Base Civil Engineers (BCEs). In a previous study wing and base commanders indicated that leadership is the most important criteria influencing Civil Engineering (CE) effectiveness. Knowing how these persons define leadership is important to those who would like to control CE's effectiveness.

A questionnaire was used to ask the wing and base commanders and the BCEs at 86 CONUS Air Force bases to rate the leadership quality of a variety of possible BCE actions. From their replies a profile of the BCE leader was formed. The study also indicated where the definition of BCE leadership differs between those groups involved in the survey. This work should help BCEs and their superiors to better understand each other's roles and expectations.

In researching this study and writing this thesis I was inspired, helped, motivated, and guided by a number of people. My gratitude and thanks go to all of the faculty and staff of the school of Systems and Logistics who influenced my work, especially Captain Ben Dilla, my thesis advisor, and Major Al Tucker, my program manager. I am indebted to Colonel Ralph Hodge for his encouragement and inspiration as a true leader and to Mr. Leon Glaspell for his insight into BCE behaviors. My greatest debts are to my wife, Ilse, and my son, Mike, without whose presence I would not have completed this project. For confidence and security during this study I looked to the prayer found on the coin and currency of the United States: In God We Trust.

Jerry P. Haenisch

Table of Contents

List of Tables

Abstract

This thesis determined how wing and base commanders define Base Civil Engineer (BCE) leadership in terms of actual BCE behaviors. A survey collected ratings of the leadership quality of a variety of possible BCE actions. Wing and base commanders and BCEs at CONUS Air Force bases rated a variety of BCE behaviors as indicating good or poor leadership or no relation to leadership. Their responses were analysed using statistical methods. Results indicated good leadership ratings for those BCE actions involving enforcement of high standards, personal initiative in communications, and interest in the welfare of the Civil Engineering (CE) work force. Behaviors rated poor on the leadership scale included: permitting low appearance standards, not participating in base-level functions, and avoiding publicity for CE activities. Important indicators of BCE leadership were base appearance, the appearance of CE personnel, and the results of performance inspections. The survey respondents identified poor communications by the BCE as the behavior most damaging to good leadership.

For several of the behavior items the groups of respondents differed significantly in their ratings. Knowledge of such differences can help the BCE to anticipate the impact of his actions on his immediate superiors. Individuals assigned to command and BCE positions may find it useful to discuss the various behavior items with each other to aid in mutual understanding and communication.

ATTRIBUTION OF BASE CIVIL ENGINEERING LEADERSHIP BY WING AND BASE COMMANDERS

I. Introduction

Issue

In their 1983 master's thesis for the Air Force Institute of Technology (AFIT), Captains McKnight and Parker found that Air Force wing and base commanders rate leadership as one of the most important factors determining the effectiveness of base Civil Engineering (CE) squadrons (19). The concept of leadership, however, has not been universally defined, for differing theories of leadership abound in the literature. Knowledge of the operational interpretation of leadership used by commanders would be useful to those interested in measuring the overall effectiveness of CE.

Problem

Prominent Air Force civil engineering officers have stated that one measure of the Base Civil Engineer's (BCE) leadership is the perception of that attribute by the BCE's superiors (2, 6, 28). McKnight and Parker's research indicates a possible link between the wing and base commanders' perception of BCE leadership and their overall expectations for CE effectiveness. How these commanders define leader behavior requires clarification before further analysis can be made concerning the leadership - effectiveness linkage. This research attempts to establish an operational definition of BCE leadership.

Research Questions

The following questions provided direction for this research project. The answers to the questions help to resolve the problem stated above.

1. Which BCE behaviors are perceived by wing and base commanders to indicate leadership or the lack of it?
2. To what degree is leadership indicated by these behaviors?
3. To what degree do wing and base commanders agree concerning the definition of leadership behavior by BCEs?
4. Is there a clear distinction between the BCE's leadership and non-leadership behaviors?
5. How do the BCEs' definitions of leadership behavior compare to the views of their superiors?

Background

Over the years much research has been directed toward describing and measuring leadership behavior (3). One common approach categorizes or defines specific types of behavior perceived in leaders. The Ohio State studies are an example of such investigations (11). Another approach models the situational factors affecting leader-follower interactions (7). Still others describe the motivational variables that are intrinsic to leadership situations (13, 25). One fact emerges from analysis of these broad approaches to leadership study: there is a great number of variables that influence the perception and definition of leadership.

The following quotation from an article by Jeffrey Pfeffer in the Academy of Management Review indicates the importance of perceptions of leadership. "Whether or not leader behavior actually influences performance or effectiveness, it is important because people believe it

does" (22:110). The idea that a definition of leadership exists in the public mind is proposed by Staw and Ross (27:251). They postulate two factors that moderate the perception of leadership by the public, consistency and success. The researchers state, "Administrators who are consistent in a course of action are generally rated more positively than those who experiment with programs [and]... the ultimate success of a program affects whether one is rated positively or not" (27:251-252). Their conclusions have support in the literature.

A study by Rush, Thomas, and Lord found that personal theories of leadership traits tend to influence responses to leadership questionnaires (23:93). Similar results were reported by Ilgen and Fujii (15:644), who found that subordinate ratings of leader behavior tend to reflect perceptions of what a leader should do rather than what the leader actually does. These findings and Pfeffer's quotation at the beginning of this section suggest a degree of ambiguity concerning the process of leadership perception and actual leadership behavior.

In view of this perceptual ambiguity and considering the variety of possible styles of leadership, practicing managers might wish to know just how their behavior is interpreted by their superiors.

Scope of Research

Because of the lack of consensus concerning the essential descriptions of leadership, this research project took a normative approach. The study centered on a very narrow and specific situation, the behavior of the Base Civil Engineer (BCE) assigned to Continental United States (CONUS) bases. The degree of leadership demonstrated by the BCE's behavior was evaluated by the BCE's superiors (wing and base commanders) and by the BCEs themselves. Other groups of people with

potential interest in this research topic, such as members of CE squadrons, commanders of other base-level units, and those in higher echelons within the civil engineering community were excluded to limit the scope of the study to a manageable level.

The survey used was census in nature in that the questionnaire was sent to each of 86 appropriate bases in the CONUS. Only CONUS bases were included in order to keep the groups of respondents as homogeneous as possible and to limit the number of behavioral items required to define the range of possible BCE behaviors. The selection and categorization of the bases, and specific details of the population of respondents are discussed in Chapter III, Methodology.

Organization of the Thesis Report

Chapter II contains a review of the literature related to leadership and its measurement. The review covers historical studies of leadership, and then discusses relevant theories that integrate leadership concepts with management functions. The review continues with a report on selected Air Force views of leadership. The chapter concludes with an analysis of the study of leadership and management.

The next chapter, III, is entitled Methodology. In it, the approach to this study is explained in detail. The development of the survey instrument is outlined first. Then the survey population is identified and the data collection plan discussed. The final section of the chapter examines the various statistical tests used to analyse the data collected.

Chapter IV contains the survey findings and the results of the various statistical analyses. Summary tabulations of the survey data are provided as is a narrative explaining the importance of the results.

In this chapter the answers to the research questions are found and a profile of the BCE leader is developed.

The final chapter discusses the significance of the findings and their implications. This chapter provides a final, overall summary of the research study. Suggestions are also made concerning the potential uses of the research results. The chapter concludes with recommendations for follow-on study.

II. Literature Review

Topic

This literature review discusses research and scholarly opinion concerning the description and measurement of leader behavior. It provides the background needed for development of a survey instrument capable of measuring the degree of leadership implied by certain managerial behaviors.

Scope and Limitations of This Review

The writings reviewed here reflect authors interested in the behavioral aspects of leadership. The report focuses upon studies of the dimensions of leadership, its situational moderators, and associated motivational theories. Descriptions of managerial behavior are included as are the opinions of several prominent Air Force officers concerning leadership and management.

Justification of the Review

Leadership is considered by many to be an important aspect of managerial activity. Executive level managers are identified by the public as the leaders of their organizations. The term "leadership," however, is abstract: it does not denote precise patterns of behavior. The perception of leadership, like that of beauty, lies in the "eye of the beholder." In the case of Civil Engineering squadrons, one important group of "beholders" are the BCE's superiors. Those persons must evaluate their subordinate's behaviors in terms of leadership content. The nature of that evaluation must be clear before analysis of BCE leadership is possible.

Overview

The discussion is divided into three sections. The first section describes historical leadership studies focusing on the development of the Leader Behavior Description Questionnaire (LBDQ) by the Ohio State researchers in the 1950's. The section concludes with a description of House's Path-Goal theory and Scott's behavioral approach to leader motivation. Next come theories of management processes under the label, "Management Functions." The third part of the report follows under the heading, "Air Force Views," describing leadership in the military context. A summary and analysis then integrate the various studies and opinions to form a basis for the categorization of possible BCE behaviors.

Discussion

Historical Studies. During the 1950's the Ohio State University Personnel Research Board conducted a series of studies into the nature and measurement of leadership behavior. The result of one of those studies was the development of a questionnaire designed to measure how leaders behave when leading. To construct the questionnaire the research staff categorized nine dimensions of possible leader behavior (11). Those initial dimensions are listed here:

1. Integration-acts to increase cooperation and decrease competition among group members
2. Communication-acts to increase knowledge about and understanding of group activities.
3. Production emphasis-acts oriented toward the volume of work accomplished.
4. Representation-acts which speak for the group in interaction with outside agencies.

5. Fraternization-acts which make the leader a part of the group.

6. Organization-acts which differentiate duties and prescribe methods.

7. Evaluation-acts that distribute rewards or punishment.

8. Initiation-acts leading to change within the group.

9. Domination-acts which disregard the ideas or person of members of the group. (List adapted from source 11)

The researchers thought of specific behaviors appropriate for each category. They also tasked groups of students to develop items as exercises in item development. Their combined efforts resulted in 1790 items spread across the nine dimensions. From these many items 150 were selected for inclusion in a preliminary questionnaire.

The questionnaire measured the frequency of each behavior as perceived in the actions of leaders. To avoid value or quality judgments in the responses, careful consideration was given to the choice of format and scale. A multiple choice format was chosen using combinations of tested frequency adverbs: always, often, occasionally, seldom, and never (11). The researchers then tested the instrument in a variety of leader - follower settings.

The results of the tests and subsequent analysis resulted in some modification of the original questionnaire. The researchers found that the initial nine dimensions were not independent. From the nine, three factors emerged.

1. Maintenance of membership character.

2. Objective attainment behavior.

3. Group interaction facilitation behavior.

Hemphill and Coons summarized their results in describing the three major ways of accomplishing leadership:

1. A leader may stress being a socially acceptable individual in his interactions with other group members.

2. A leader may stress "getting the job done." This would involve emphasis upon group production and concern with problems relative to obtaining the group's objectives.

3. A leader may stress making it possible for members of a group or organization to work together. Emphasis would be on the leader's job as one of a "group catalyst" [11].

The researchers emphasized that the above "hows" of leader behavior are not mutually exclusive, but are used in various combinations. Follow on research since the development of the LBDQ has refined the early Ohio State leadership findings.

Edwin A. Fleishman reports that further leadership research at Ohio State resulted in the emergence of two primary dimensions of leader behavior: "initiating structure" and "consideration" (8:6). Initiating structure involves the extent to which the leader organizes and defines group relationships, establishes communication channels, and specifies methods for job accomplishment. Consideration involves the degree of mutual trust, respect, and warmth between the leader and followers. It is best described, however, by the tolerance of the leader for two-way communications with the followers (8:8).

Fleishman's studies indicate that those supervisors rated most effective also rate high with respect to structure and consideration (8:28-29). His studies reveal that situational factors can also play a role in determining the appropriateness of a leader's behavior.

In "pressure for output" situations, high structure leaders are rated high in effectiveness, but consideration in such situations has little effect upon that rating. Another moderating influence is the

leadership style or preferences of the leader's boss. This factor appeared in cases where persons low in both structure and consideration received high proficiency ratings from their superior (8:21). Of course, such ratings are not a measure or scale for leadership alone. Effectiveness ratings of supervisors include consideration of managerial ability, politics, and purely administrative talent in addition to leadership. The role played by situational factors in moderating leadership behavior has been studied by several other researchers.

Fiedler (7:624) notes that situational control, expressed as the degree of power the leader has over the group, can be measured by the following three dimensions:

1. The loyalty and support of the group.
2. The degree of task structuring.
3. The position power of the leader.

These dimensions can be combined to quantify the degree of situational control inherent in a leadership situation (7:624). Other researchers have investigated the psychological aspects of the leader's environment.

Frost (9:137-139) investigated the influence of a leader's superior upon the leader's performance. He found that the degree of role ambiguity (uncertainty concerning job responsibilities), and role conflict (uncertainty concerning job authority) created by the superior had varying degrees of influence depending upon the experience level of the leader. Additional situational factors described by Frost include what he terms "boss-ambiguity" and "boss-conflict." These words refer to the leader's relationship with his or her superior as being uncertain or hostile (9:134-135). Similar factors were described by Katz, who found leader-follower conflict to be a moderator of leadership

effectiveness (16:265). Combinations of environmental and psychological factors have been studied in additional research.

Role ambiguity, task structure, and locus of control were identified as situational moderators by Abdel-Halim (1:74). Locus of control, either internal or external, refers to the degree to which persons feel that they can influence their environment. Highly internal persons feel that they can control their lives, while external locus of control people feel that their lives are controlled by their environment. Further evidence of the effect of locus of control on leader behavior is presented by Durand and Nord. They suggest that the personality of both the leader and follower interact to affect the leadership environment (5:435-436). Verification of the importance of situational moderators is found in a study by Schriesheim and Murphy. Their research indicated that job stress, unit size, role clarity, and job anxiety are important modifiers of perceived leader behavior (24:638-640). The fact that much of the leadership behavior studied in the literature is described as "perceived" (1:73; 5:435; 9:123; 17:543) indicates the importance of the perceptual dimensions of the field. The Path-Goal theory of leadership avoids this perception problem by focusing upon the psychological needs of the subordinate and how the leader manipulates those needs.

In their Path-Goal theory, House and Dressler define six primary motivational functions of the leader (14:30). The functions are listed here:

1. Recognizing and/or arousing subordinates' needs for outcomes over which the leader has some control.
2. Increasing personal payoffs to subordinates for work goal attainment.

3. Making the path to these payoffs easier to travel by coaching and direction.

4. Helping subordinates clarify expectations.

5. Reducing frustrating barriers.

6. Increasing the opportunities for personal satisfaction contingent on effective performance [14:30].

According to the researchers, "The theory asserts that to the extent that the leader accomplishes these functions his behavior will increase the motivation of subordinates to perform" (14:31). House and Dressler see no conflict between their theory and the two classes of leadership behavior, initiating structure and consideration. Both behaviors readily fit into the six leader functions listed above.

Initiating structure clarifies goals, defines the path to the goals, and specifies the rewards possible. Through consideration the leader reduces frustration, increases personal payoffs, and arouses the subordinates' needs to reach the goals. To the extent that the goals, path to the goals, and rewards are clear to the subordinate, the leader's initiating structure behavior may be seen as redundant. House hypothesizes that such redundancy will decrease subordinate satisfaction (13). Consideration, on the other hand, is never seen as a negative factor, but tends to reinforce the subordinate's perception of the value of the task in terms of personal satisfaction. In an approach similar to that of House and Dressler, Scott proposes viewing leadership as a class of human operant behavior (25). His analysis includes three dimensions.

First, the topography or situational factors are identified. These factors represent the Discriminative Stimuli (SDs) for the leader. The presence of these stimuli increases the probability of leader type

behaviors or operants. Such factors as formal title descriptions, policy statements, and job descriptions are but a few of the many possible discriminative stimuli. One strong source of SDs is the very presence and behavior of the followers (25:87). He extends the definition of the environment to include any events that cause leader types of behavior. For instance, many problem situations lead to such actions as thinking, problem solving, or decision making. If these activities result in overt plans, policies, or rules, then such thought-type activities could be classified as leader behavior (25:88). Identification of leader operants is Scott's second dimension of analysis.

"Leadership does not imply activity. It is activity" (25:89). Activity alone does not constitute leader behavior: the actions must somehow produce a change in the actions of others. Scott defines three classes of possible leader operants:

1. Problem-solving behavior as characterized by the "alert", "knowledgeable", "task oriented" leader.

2. Stimulus control operants are those related to verbal activity. Suggestions, advice, commands, and other communication behaviors are included in this category.

3. Reinforcing operants are those leader responses that are seen as rewarding to the follower [25:86].

The consequences of these three types of leader operants make up the third dimension of analysis.

Leader behavior is as much influenced by the results of leader actions as is the behavior of the follower. Scott sees positive follower responses to leader operants as a form of reinforcement for those operants. Through social reinforcers (pay, praise, recognition, success) the leader's actions are shaped toward a specific behavioral

repertoire. The resultant behavior set is, then, controlled by the situational factors antecedent to it (25:86).

Scott's functional analysis appears to encompass a variety of leadership theories. Personality traits play a major role in determining the effect of various operants and reinforcers on the leader. Behavioral factors are important in classifying which operants truly influence followers. Expectancy theory and path-goal considerations can be expanded to include the motivations and path clarifications of the leader as well as the follower. As Scott indicates his approach is limited by the rather large task of identifying and incorporating the many complex variables as yet undefined within each dimension of analysis (25:93). "Initiating structure" and "consideration" describe specific sets of behavior. Together with the personality of the leader and the situation at hand, they define the leadership context. The next section describes how this leadership context is related to the activities of management.

Management Functions. Leadership researchers frequently assign the leader role to that person who fills a supervisory position. Subordinate members of the work group describe the behavior of the supervisor. That supervisor may also do a self-description. These descriptions generate a profile of the "leader." Precise distinctions between the concepts of manager, supervisor, and leader do not exist in much of the research on leadership. For instance, Yukl and Nemeroff (30:199) use a questionnaire called the "Managerial Behavior Survey" to measure leadership behavior. They derive the survey items from such typical management activities as, planning, coordinating, organizing, directing, monitoring, decision making, assuming responsibility, and

establishing good relations (30:199). Blanchard equates the leader with the manager in similar fashion as evidenced in the following quotation.

> The decisions he makes in his first work group concerning subordinate performance are communicated as planning, organizing, directing, and controlling type stimuli. These decisions are based not only on feedback received by him as a leader from his subordinates, but also feedback received by him from the leader of his higher level work group [4:36].

Although some theorists debate whether leader behavior is distinct from management, leadership can possibly be represented by the manner in which certain managerial actions are performed.

Henry Mintzberg describes the leadership-management relationship in this way: "...we must first note that leadership permeates all activities; its importance would be underestimated if it were judged in terms of the proportion of a manager's activities that are strictly related to leadership" (20:61). In words similar to those of the Path-goal theory, Mintzberg states that "the key purpose of the leader role is to effect an integration between individual needs and organizational goals" (20:62). The manager can most positively influence follower needs in those activities involving personal interaction with subordinates. Three such activities noted by Mintzberg are as follows:

1. Staffing. This function includes: hiring, training, judging, paying, promoting, and dismissing.

2. Motivating. Includes giving advice, encouragement, compliments, rewards, discipline, and setting an example.

3. Meddling. Mintzberg describes this action as a constant checking up on the organization through tours, interviews, and by seeking information from personnel (20:64).

When a supervisor is engaged in any managerial activity there exists a potential for leader influence. A description of possible managerial functions would be useful to the study of leadership.

In his book Executive Performance and Leadership, Carroll L. Shartle (26) notes fourteen activities performed by executives. Those actions are listed here because of their importance to the later categorization of BCE behaviors.

1. Inspection of the organization. This refers to direct observation of the operation to determine conditions and keep informed. It is also a channel for communications, recognition, and visibility.

2. Evaluation. Of people, units, and overall performance.

3. Supervision. Direct control over immediate subordinates.

4. Personnel activities. Selection, training, evaluation, motivation, and discipline of people to effect morale, loyalty, and cooperation.

5. Professional consultation. Giving of advice both within and external to the group.

6. Negotiations. Settling of disputes, buying and selling.

7. Scheduling, routing, and dispatching. Initiating action and setting the time, place, and sequence of actions.

8. Coordination. Integration of the activities of the group and subordinate units to achieve economy, efficiency, and control.

9. Public relations. Information to outsiders and feedback to insiders to create goodwill.

10. Preparation of procedures and methods. Involves making strategy for the implementation of plans.

11. Interpretation of plans and procedures. Involves explaining to others what is to be done as well as how, when, and where.

12. Planning. Making decisions which will affect the future of the organization and conferring with others about long and short range goals.

13. Investigation and research. Accumulation of data in the form of written reports.

14. Technical (professional) operations. Specialized duties unique to a profession (Adapted from source 26:375-376).

When performing these functions the manager exerts some degree of

influence on his or her subordinates. The measure of this influence is an indicator of the leadership content of the manager's behavior. The next section reviews the opinions of some leading Air Force officers concerning how leadership can be observed in the military setting.

Air Force Views. Colonel Peter Land USAF (Ret) was base commander at Scott AFB, Illinois. In an article for the Air University Review (18), he presents four criteria or functions of the Air Force leader. Those functions are summarized below.

1. Training and delegation. "By applying generous doses of time, training, and trust--the three T's--you can move the focus of decision making down the organization. This practice gets your people involved and frees senior officers for handling bigger issues" (18:24).

2. Positive reinforcement. Define high standards of excellence then provide positive reinforcement through reward or public praise. Make such reinforcement a matter of policy.

3. Teamwork. The commander must be the personal embodiment of the mission. His or her tone and actions should focus the staff's attention on the broad mission and make individual unit's concerns secondary.

4. Effective decision making. The commander should involve subordinates in gathering data and supplying information. Subordinate's recommendations should be solicited and decisions made based upon all available information. A leader must remember that timing is an important aspect of the decision process (18:23-26).

Inherent in the above items are the two leadership dimensions of initiation of structure (setting standards, defining the mission) and consideration (trust, subordinate involvement in decision making). Obvious, too, is the element of motivation as evidenced in the positive reinforcement factor.

From the CE point of view the functions of leadership fit much the same pattern. Brig. Gen. Alkire, Deputy Director for Engineering and Services, maintains that the BCE must be visible and active in the base community. Alkire sees BCE leadership as a function of the perception and personality of the base commander. If the BCE can get out and view the base as his superior sees it the troops will follow the lead (2). Other civil engineering leaders are even more specific.

Colonel Ralph Hodge, Deputy Chief of Staff for Engineering and Services, Alaskan Air Command, provides a detailed listing of desirable behaviors for the BCE (12). His items are listed here.

1. Track the budget and spend early--have a plan to use all your available resources.
2. Insist on professionalism in yourself and others.
3. Use formal military titles in personal interactions.
4. Put responsibility upon those whose task it is to support CE. Clearly define work roles both within and external to the organization.
5. Keep the base looking good. Begin with overall appearance items then proceed to other work.
6. Encourage self-help work. Make the functional managers responsible for their areas.
7. Keep harmony with other members of the base staff.
8. Take care of your personnel. Reward, promote, and protect them for their efforts.
9. Make public relations an important part to the job. Market the work of CE; talk about CE's efforts publicly, and write about your work as often as possible.
10. Visit frequently with the working people within CE. Tour the work centers regularly.
11. Bring your superiors to the unit and give them tours of the work centers.

12. Use your subordinates to their fullest capacity. Delegate, train, and give responsibility to junior personnel. Allow them to "fail" without dire consequences.

13. Be selfless. Make the sacrifices needed to help others and accomplish the overall mission [12].

The activities of the effective BCE are similar to those suggested for the base commander. In general, they are typical of the actions recommended for any leader or manager. The analysis section will integrate the leadership functions presented in this discussion and create a framework of factors to be used in the development of a BCE leadership survey questionnaire.

Analysis

The broad discussion of leadership theories and management functions presented above indicates considerable similarity between leadership behavior and effective management actions. Indeed, leadership was said by Mintzberg to permeate all management activities (20:61). Any specific management act should, then, contain a degree of leadership impact. One might expect the leadership content of the actions contained in a given manager's behavioral repertoire to vary from very small to very great. Categorizing those actions into high and low leadership groups would provide a situational definition of leadership behavior for that particular manager. The perspective of the person performing such a categorization would dictate the specific behaviors to be rated. Since any single, homogeneous group of raters can perceive only a small quantity of a given manager's actions, the number of behaviors involved need not be very great.

In his book Leadership in Organizations, Gary Yukl categorizes nineteen types of management behavior related to leadership (29:121-125). These nineteen factors appear to encompass the various items listed earlier in this chapter concerning management or leadership actions. Yukl's factors are listed below.

1. Performance emphasis
2. Consideration
3. Inspiration
4. Praise-recognition
5. Structuring reward contingencies
6. Decision participation
7. Autonomy-delegation
8. Role clarification
9. Goal setting
10. Training-coaching
11. Information dissemination
12. Problem solving
13. Planning
14. Coordinating
15. Work facilitation
16. Representation
17. Interaction facilitation
18. Conflict management
19. Criticism-discipline

Each of the above classes of behavior entails actions that can be perceived as either high in leadership, low in leadership, or not related to leadership. The actual degree of leadership attributed to any single action depends primarily upon the orientation of the observer. For example, an immediate superior may interpret a manager's behavior differently than that manager's subordinates or peers. How a homogeneous group of observers interprets the manager's actions indicates that group's definition of leadership for that manager.

Managerial behaviors do not occur in isolation, however. Any evaluation of leadership must involve the aggregate of actions taken by the manager over a period of time. For a military manager, such as the Base Civil Engineer, the variety of actions possible within the nineteen behavioral categories is definitely finite. Institutional and organizational constraints limit the BCEs behavioral repertoire. The typical three year tenure of duty for a BCE also provides a suitable time frame for evaluation. With a definable range of possible actions observable over a specified time period, the potential exists to define

BCE leadership from several points of view.

Groups interested in BCE leadership include subordinate squadron members, BCEs themselves, the BCE's superiors (wing and base commanders), and others outside of the civil engineering community. The next chapter describes the methodology used to define BCE leadership behavior from the viewpoints of the BCE and the wing and base commanders.

III. Methodology

Introduction

The primary purpose of this research project was to answer five questions concerning BCE leadership. Those questions are stated again here.

1. Which BCE behaviors are perceived by wing and base commanders to indicate leadership or the lack of it?

2. To what degree is leadership indicated by these behaviors?

3. To what degree to wing and base commanders agree concerning the definition of BCE leadership behavior?

4. Is there a clear distinction between BCE leadership and non-leadership behavior?

5. How do the BCEs' definitions of leadership behavior compare to the views of their superiors?

This chapter describes and explains the approach taken to answer the above questions.

Five topical areas are discussed. First, the rationale behind the use of a survey to collect data is explained. Next, the development and testing of the survey instrument is outlined. Following that is a description of the population involved in the study. The Data Collection Plan section supplies the details of survey administration. Concluding the chapter is a section explaining the statistical tests used to analyze the data collected.

Justification

The opinions of commanders at 86 CONUS Air Force bases were needed in order to answer the questions posed by this research. A limited amount of time was available to collect those opinions. Ongoing graduate class work prevented this researcher from traveling to each

base to speak with each commander. A written questionnaire mailed to each desired respondent enabled data collection in a relatively short time with no personal travel involved. Although the items contained in the survey were subject to misinterpretation by the respondents, this drawback was outweighed by the ease and timeliness of the questionnaire approach.

The survey method permitted the researcher to contact the entire study population. Previous experience with similar questionnaires (19) lead one to expect a return rate that would be adequate for meaningful statistical analysis. The survey itself was constructed to facilitate such analysis. Details of that construction are discussed in the next section.

Survey Instrument

The survey used to collect research data consisted of a cover letter and a five part questionnaire. A Privacy Act statement was not required since personal information was not requested. The following paragraphs describe each part of the instrument. The complete survey is reproduced in Appendix A.

The cover letter introduced the survey to the respondent and briefly explained the purpose of the study. A tradeoff was necessary here to be brief enough, but to fully explain the survey. A short endorsement paragraph signed by the Dean of the School of Systems and Logistics added authority to the survey.

Part I of the questionnaire contained three demographic items. Requested were the respondent's major command, relative base size, and duty title. The ranges for the base size (less than 5000, 5000 - 7500, more than 7500) were chosen to provide nearly equal numbers of

respondents in each category. Estimates of present base sizes were drawn from the May 83 issue of Air Force Magazine. These three demographic questions provided the basis for respondent groupings used in the statistical analysis of the survey data.

The BCE behaviors to be evaluated were contained in Part II of the survey. Forty-five items were developed based upon the nineteen categories of leader behavior described in the Analysis section of Chapter II. The specific behavior items were drawn from several sources. Colonel Hodge's listing of leader actions (12) provided some, while others were derived from an interview with Mr Leon Glaspell, Deputy Base Civil Engineer, Wright-Patterson AFB, OH (10). The researcher's personal experience provided the remainder of items chosen.

Within each behavior category, BCE actions were chosen that would be visible to or known to the wing and base commanders. Also an attempt was made to include expected high, low, and neutral leadership actions in each category. For instance, under the Criticism - Discipline category, items #17 (The BCE conducts frequent open - ranks inspections of CE military personnel) and #39 (The BCE seldom inspects CE personnel) were chosen to represent the range of behaviors open to the BCE. To help avoid trends in item-to-item responses the questions were sequenced to vary expected high and expected low ratings. The intended result was a change in rating direction every several questions.

A seven-point Likert style scale was provided for the ratings. The seven-point scale permits meaningful differentiation between low, neutral, and high ratings. The "Leadership Quality Scale" consisted of the following points: very poor (-3), poor (-2), mildly poor (-1), not related (0), mildly good (+1), good (+2), very good (+3). The "poor"

side of the scale was labeled with negative numbers to convey the idea that behaviors so rated are "negative" or undesirable. Similar thinking indicated the use of the plus sign for the "good" side of the scale. The plus-minus arrangement also emphasized the neutrality of the "not related" rating.

The third section of the survey, Part III, contained nine criteria of civil engineering effectiveness. The nine items included five mission performance related criteria (2,3,4,5,7) and four people oriented criteria (1,6,8,9). The respondent was asked to rate each item as an indicator of BCE leadership. Analysis of these responses was expected to indicate whether a people or performance orientation existed among the respondents.

Although practicing managers may be interested in the behaviors of a highly rated leader, of perhaps greater interest are those actions that have been proven to damage a leadership image. Part IV was an open ended section that asks the respondent to list those actions that are most damaging to BCE leadership. Because of the additional effort required to think of and write in responses to this question, the statements in this section reflected fairly strong feelings.

The final section of the questionnaire was another open ended section designed to give the respondents the opportunity to comment on BCE leadership or its measurement. Again, the opinions expressed in this section represented important issues to the commanders and BCEs who took the time and effort to write them. While not included in the statistical analysis, these written comments provided valuable insights into the meaning of BCE leadership.

The entire survey instrument was tested for face validity and clarity by administering it to members of the AFIT graduate faculty, fellow Engineering Management graduate students, and Mr Glaspell. Based upon inputs from the pre-tests, revisions in wording and item content were made. Additional revisions were made in response to suggestions by the Research and Measurement Division, Air Force Manpower and Personnel Center, Randolph AFB, Texas. The revised survey was assigned USAF Survey Control Number 84-40, valid until 30 December 1984. The approved surveys were mailed out on 15 May 1984. By 1 July 1984, the return of completed questionnaires had ceased.

Population

The population of respondents for this survey included the host wing commanders, base commanders, and BCEs at 86 CONUS Air Force bases. Since this population definition encompassed all of the people represented in the research questions the survey was a census of the population. Other groups of people with potential interest in this research topic, such as members of CE squadrons, commanders of other base level units, and higher level echelons within the civil engineering community, were excluded to limit the scope of the study to a manageable level.

Data Collection Plan

The responses in each part of the questionnaire were coded numerically to simplify data entry and statistical analysis. The following translation was used for the nominal type, demographic data from Part I.

Item #1: Command.

1 = AFLC	4 = MAC	7 = Space Command or AU
2 = AFSC	5 = SAC	8 = USAFA, AFRES, OR AFRC
3 = ATC	6 = TAC	

Item #2: Base size.

1 = Less than 5000 personnel.
2 = 5000 to 7500.
3 = More than 7500.

Item #3: Duty title.

1 = Wing or Air Division commander.
2 = Base or Combat Support Group commander.
3 = Base Civil Engineer or DCS/civil engineering.

Part II collected ordinal type data using the seven point Likert scale described earlier. The 0 to 5 scale in Part III was used directly. Blank entries or missing data were coded "0" for Part I and "9" for Parts II and III. A tabular listing of the data is contained in Appendix B along with listings of the statistical programs used to analyze the data. The next section on statistical tests explains those programs.

Statistical Tests

The statistical analyses used in this study help to answer the five research questions. Questions #1, #2,and #4 asked for the distinction between leadership and non-leadership BCE behaviors as perceived by wing and base commanders. Questions #3 and #5 looked for differences in leadership perception between the three groups of respondents. The tests used to answer these questions are discussed in the following paragraphs.

Statistical manipulations were performed on the AFIT Cyber computer using routines contained in the Stastical Package for the Social Sciences (SPSS) (21). Routines used included: Frequencies,

Condescriptive, and T-Test. The first two routines, Frequencies and Condescriptive, provided statistical summaries of survey responses.

The Condescriptive run yielded such descriptive statistics as the mean, median, mode, variance and standard deviation. From this information it was possible to classify behavior items into good, poor, or neutral leadership groups. Such classification provided the distinction between leadership and non-leadership behaviors needed to answer research questions 1, 2, and 4. The interpretation of the item ratings conformed to the following criteria:

Good leadership actions:	Mean rating of +1.0 or greater.
Neutral leadership action:	Mean between -0.99 and +0.99.
Poor leadership action:	Mean rating of -1.0 or less.

The distribution of the responses for each item was provided by the Frequencies routine. This output indicated the range of responses and whether any polarity existed in the ratings. Those items found to have widely dispersed responses (variance greater than 2.5) or showing distinct polarity in response distribution were selected for closer scrutinity using more elaborate statistical tests.

The T-Test is a comparison of item means of two groups of respondents. For example, the mean of wing commander responses to Item #1 can be compared to the mean of BCE responses to the same item. Such comparisons provided the answers to research questions 3 and 5. The T-Test, however, requires certain assumptions about the data. Those assumptions are listed here.

-- The underlying distribution of the data must be normal. This assumption is robust when 30 or more data cases are involved, as was the case in this study.

-- The sample mean is an efficient estimator of the population mean. In this study the sample is the entire population, which satisfies this constraint.

-- The data is interval type. Nie, in the SPSS manual, cites arguments by Coombs, Labovitz, and Abelson and Tukey that justify the use of parametric procedures, such as the T-Test, on ordinal-level data (21:6). Data from the Likert-type scale used in this study can be considered ordered metric level. The use of parametric statistics on such data were deemed appropriate by this researcher for the purposes of this study.

The T-Test procedure was used to identify differences in group ratings for each item. The items were tested in groups of command, base size, and duty title. Those items which showed differences at or below the 0.05 significance level for any group are identified in the next chapter: Findings and Analysis.

IV. Findings and Analysis

Introduction

This chapter describes the results of the survey effort. The data collected through the questionnaire is summarized and analyzed in terms of the five research questions. The chapter begins with some administrative facts concerning the survey. Demographic descriptions of the respondents and return rate statistics are provided. Next, the items in Part II of the survey are categorized according to their leadership rating. The behavior items are rated as good, poor, or not related to leadership. The results of the comparative statistical tests are provided to indicate where significant differences of opinion existed between the rating groups. Following the record of findings is a section labeled "Post-hoc Analyses" in which those behavioral items with polarized response distributions are noted. An analysis of the results and summary statement conclude the chapter.

Record of Findings

Of the 251 surveys mailed, a total of 160 were returned yielding an overall response rate of 63.7%. Tables I and II provide a demographic summary of the respondents who participated in this research. The tables indicate the number of respondents from each of the three categorization groups: Command, Duty Title, and Base Size.

TABLE I

RESPONSES BY COMMAND AND DUTY TITLE

COMMAND	RESPONDENTS WING	BASE/CSG	BCE	TOTAL
AFLC	1	2	6	9
AFSC	0	5	4	9
ATC	4	7	9	20
MAC	7	10	8	25
SAC	14	18	20	52
TAC	14	8	12	34
SP/AU	1	0	2	3
USAFA,AFRES AFRC	1	1	3	5
TOTAL	42	51	64	157*

* 3 surveys missing demographic information. 160 total returned surveys.

TABLE II

RESPONSES BY BASE SIZE

BASE SIZE	RESPONSES
LESS THAN 5000	44
5000 TO 7500	57
MORE THAN 7500	54
MISSING DATA	5
TOTAL	160

Bases from each size category were well represented as were respondents assigned to each of the three primary duty titles. Each of the Major Commands participated in the survey. Three of the returned questionnaires could not be classified due to missing demographic data. Three surveys were returned completely blank, possibly because those bases had no wing commander position. Thirteen respondents were confused by the survey instructions and attempted to rate the incumbent BCE. Part II responses from those surveys were coded as missing data.

The behavior items of Part II were categorized into one of three groups: good leadership, poor leadership, and "not related" which included all items not listed in the above tables. Several unrelated items that received unusual response distributions are discussed in the next section, Post-Hoc Analyses. The ratings given in the tables conform to the values provided in the original survey instrument. For example, "-3" indicated a "very poor" rating, while "+3" indicated a "very good" rating. A scale translation is provided at the top of each table.

Table III is a list of those behavior items rated as indicating good leadership quality. The items are listed in order of highest rating by the wing commanders to their lowest rating in the "good" category. The "remark" column contains an indicatior of significant differences in ratings between the respondent groups. The T-Test procedure was used to determine for which items such significant differences occured.

TABLE III

BEHAVIORS RATED AS GOOD LEADERSHIP QUALITY

1 = Mildly Good 2 = Good 3 = Very Good

BCE	Behavior Item	MEAN RATING WING	BASE	BCE	REMARK
2.	The BCE enforces strict adherence to AFR 35-10 standards by all military members of Civil Engineering.	2.6	2.5	2.5	
1.	The BCE personally visits most CE job sites.	2.6	2.4	1.6	BC
11.	The BCE initiates formal meetings to brief the wing and base commanders and to clarify important issues.	2.5	2.5	2.2	
31.	The BCE frequently invites the wing and base commanders to visit the CE area.	2.5	2.3	2.1	B
6.	The BCE publicizes CE activities through informational articles in the base newspaper.	2.5	2.2	2.3	
41.	The BCE anticipates the desires of the wing and base commanders and acts accordingly.	2.4	2.3	2.2	
42.	The BCE strongly presents the CE position at wing and base staff meetings.	2.3	2.3	2.5	
14.	The BCE frequently meets socially with his peers on the base staff.	2.2	2.1	1.8	B
45.	The BCE ensures that special interest projects receive close attention by CE managers.	2.1	2.2	2.2	
20.	The BCE lives on base.	2.1	2.2	1.4	BC
24.	The BCE puts decision making authority at the lowest possible level in the CE organization.	2.0	1.8	2.3	
36.	The BCE is formal in the use of military titles and courtesies.	2.0	1.9	1.8	
30.	The BCE uses informal meetings to establish plans and transfer information to and from the wing and base commanders.	1.8	1.4	1.7	

REMARK: A = Significant difference between wing and base commanders.
B = Significant difference between wing commander and BCE.
C = Significant difference between base commander and BCE.
Significance determined at the 0.05 level using T-Test.

TABLE III (CONTINUED)

1 = Mildly Good 2 = Good 3 = Very Good

BCE Behavior Item	MEAN RATING WING	BASE	BCE	REMARK
28. The BCE consults with the CE staff before making most decisions.	1.8	1.2	1.9	A C
34. The BCE ensures that senior CE officers are reporting officials for junior CE officers.	1.7	1.6	0.8	BC
21. The BCE frequently wears the fatigue uniform to work.	1.6	1.5	0.5	BC
27. The BCE signs more than the base average of letters of commendation and appreciation.	1.4	1.1	2.0	BC
12. The BCE brings subordinate staff members to most wing and base staff meetings.	1.4	1.2	1.0	
15. The BCE ensures that all CE personnel adhere strictly to established daily working hours.	1.2	1.4	1.5	
38. The BCE relies upon project officers to manage most of CE's major work.	1.1	1.2	1.2	
8. The BCE is protective of the CE work force.	0.5	1.3	2.0	ABC

R[illegible] gnificant difference between wing and base commanders.
gnificant difference between wing commander and BCE.
ignificant difference between base commander and BCE.
Significance determined at the 0.05 level using T-Test.

From these items it appears that BCE leadership behavior involves enforcing high standards, taking action, initiating communication, setting a good example, and taking an active interest in the CE work force. Table IV, on the next page, lists those behaviors rated as poor in leadership quality. The items are listed in order of those rated most poor by wing commanders to those rated least poor. Again, the remark column indicates items whose ratings differed significantly between groups as indicated by the T-Test.

TABLE IV

BEHAVIORS RATED AS POOR LEADERSHIP QUALITY

-3 = Very Poor -2 = Poor -1 = Mildly Poor

BCE Behavior Item	MEAN RATING WING	BASE	BCE	REMARK
26. The BCE permits relaxed appearance standards for the most productive personnel within CE.	-2.6	-2.1	-2.3	
43. The BCE keeps CE activities out of the base newspaper to the greatest extent possible.	-2.4	-1.9	-2.3	
39. The BCE seldom inspects CE personnel.	-2.4	-1.9	-1.6	B
35. The BCE seldom attends base-level functions (i.e., parades, speeches, open houses).	-2.2	-1.9	-2.3	
4. The BCE lives off base.	-2.0	-1.7	-1.1	B
40. The BCE meets with other base staff members only in formal meetings.	-1.8	-1.5	-1.6	
19. The BCE meets each crisis as it arises rather than relying on pre-established plans.	-1.6	-0.8	-1.2	
16. The BCE is personally involved in all the routine decisions within CE.	-0.6	-0.7	-1.7	BC

REMARK: A = Significant difference between wing and base commanders.
B = Significant difference between wing commander and BCE.
C = Significant difference between base commander and BCE.
Significance determined at the 0.05 level using T-Test.

Poor BCE leadership behaviors can be described as passive and uninvolved. Actions leading to low standards and low involvement with the base were rated poor. On the next page is Table V listing the ratings for the leadership indicators from Part III of the survey. The items are listed in order of decreasing value as rated by the wing commanders. The lettters in the remark column indicate where significant differences in ratings occured between groups. The T-Test was used to determine such differences.

TABLE V

RATING OF CE EFFECTIVENESS CRITERIA AS LEADERSHIP INDICATOR

2 = Low Value 3 = Moderate Value 4 = High Value 5 = Very High Value

Effectiveness Criteria	MEAN RATING WING	BASE	BCE	REMARK
3. Appearance of the base.	4.7	4.6	4.4	B
1. Dress and appearance of CE Personnel.	4.2	4.2	4.2	
5. Results of Operational Readiness or other performance inspections.	4.2	4.1	4.2	
2. Compliance with budget.	4.0	4.3	3.8	C
4. Results of IG inspections.	4.0	4.0	3.8	
9. Number of awards presented to CE personnel.	3.7	3.8	4.0	
7. Size in dollars of the Military Construction Program (MCP) relative to prior years.	3.3	3.2	2.6	BC
8. Participation of CE personnel in base level sports competition.	3.0	3.4	3.0	
6. Number of CE related articles in base paper.	2.9	3.1	3.0	

REMARK: A = Significant difference between wing and base commanders.
B = Significant difference between wing commander and BCE.
C = Significant difference between base commander and BCE.
Significance determined at the 0.05 level using T-Test.

The most highly rated indicators were those related to end results rather than those dealing with ongoing performance. Table VI on the next page summarizes the comments from Part IV of the survey in which respondents identified the BCE actions most damaging to good leadership The number of comments related to each item by each respondent group are noted under the Frequencies heading. The actions are listed in order of decreasing number of total comments for each item.

TABLE VI

BCE ACTIONS MOST DAMAGING TO GOOD LEADERSHIP

BCE ACTION CATEGORY	FREQUENCIES			
	WING	BASE/CSG	BCE	TOTAL
Poor communications by the BCE, upward, downward, or in general.	9	7	11	27
Inaction. Non-responsiveness to command or customers.	9	8	8	25
BCE being too involved in CE routine operations. Micro-managing, not delegating.	6	5	11	22
Poor discipline or low standards.	7	5	9	21
Poor planning or goal setting.	5	5	7	17
BCE not being informed about jobs and not visiting CE job sites.	8	3	5	16
BCE too defensive or negative.	8	3	5	16
BCE too independent and not involved in base or wing activities.	2	5	9	16
Over reliance on or excessive deference to civilians within CE.	9	2	3	14
Showing favoritism.	1	2	10	13
Being inconsistent in personnel actions.	0	2	10	12
Making poor decisions.	0	3	9	12
Not taking care of CE personnel.	1	3	8	12
BCE being too submissive to commanders.	1	3	6	10
Not developing his subordinates.	1	0	8	9
Setting a poor example or having poor character traits.	1	1	7	9
BCE not being visible to the troops.	0	0	5	5
Poor job knowledge.	0	5	0	5
Being self or career oriented.	0	2	3	5
Being technical, not military.	1	2	1	4

Post-hoc Analyses

Several behavioral items whose mean ratings indicated that they were not related to leadership were found to have very polarized rating distributions. Although the mean score fell into the not related range, actual responses were in both the good leadership area and the poor leadership area. The response distributions for such items are noted below. The T-Test procedure was used to determine whether the differences in ratings were due to different response patterns among groups based upon MAJCOM, base size, or duty title. In each case, the level of significance used for the T-Test was 0.05.

Item 5. The BCE permits deviation from established working hours for highly productive non-union CE personnel.

Mean = -0.2
Variance = 4.1

Rating	Responses	Rating	Responses
Very Poor (-3)	27	Very Good (+3)	13
Poor (-2)	23	Good (+2)	24
Mildly Poor (-1)	14	Mildly Good (+1)	25
Total	64	Total	62

No significant differences found between different commands, base sizes, or duty titles.

Item 7. The BCE keeps flexible organizational goals that are readily modified at CE staff meetings.

Mean = +0.4
Variance = 3.7

Rating	Responses	Rating	Responses
Very Poor (-3)	8	Very Good (+3)	21
Poor (-2)	27	Good (+2)	33
Mildly Poor (-1)	22	Mildly Good (+1)	26
Total	57	Total	80

No significant differences found between grouped respondents.

Item 25. The BCE permits his deputy to manage most of the operational functions of the CE activity.

Mean = +0.2
Variance = 3.2

Rating	Responses	Rating	Responses
Very Poor (-3)	13	Very Good (+3)	7
Poor (-2)	15	Good (+2)	39
Mildly Poor (-1)	28	Mildly Good (+1)	33
Total	56	Total	79

Significant difference between BCEs (-0.4) and wing commanders (+0.2).
Significant difference between BCEs (-0.4) and base commanders (+0.6).
Significant difference between small bases (+0.9) and large bases (-0.1).

Item 33. The BCE maintains a generous three-day pass policy which is implemented by CE's senior NCOs.

Mean = +0.1
Variance = 2.7

Rating	Responses	Rating	Responses
Very Poor (-3)	11	Very Good (+3)	9
Poor (-2)	15	Good (+2)	21
Mildly Poor (-1)	31	Mildly Good (+1)	40
Total	57	Total	70

No significant differences found between grouped respondents.

Item 37. The BCE has established strict criteria for three-day passes and other rewards, and maintains strict personal control over such programs.

Mean = +0.6
Variance = 3.1

Rating	Responses	Rating	Responses
Very Poor (-3)	5	Very Good (+3)	21
Poor (-2)	14	Good (+2)	35
Mildly Poor (-1)	33	Mildly Good (+1)	29
Total	52	Total	85

Significant differences between BCEs (0.0) and both wing (+1.0) and base (+1.0) commanders.

Item 44. The BCE delays decision making until all the issues have been reviewed by all agencies or persons involved.

Mean = +0.2
Variance = 2.9

Rating	Responses	Rating	Responses
Very Poor (-3)	12	Very Good (+3)	8
Poor (-2)	13	Good (+2)	30
Mildly Poor (-1)	34	Mildly Good (+1)	38
Total	60	Total	76

Significant difference between BCEs (-0.3) and base commanders (+0.8).

Analysis of Results

The five research questions are answered below based upon the results found in this research.

Research Question 1. Which BCE behaviors are perceived by wing and base commanders to indicate leadership or the lack of it?

The behaviors listed in Table III were rated as having good leadership quality. The items in Table IV were rated as having poor leadership quality. From the behaviors listed in both tables the following profile of the perceived BCE leader emerges.

A good BCE leader is an active, involved person who demands high standards from his subordinates. He is assertive, and initiates communications with his superiors through every means possible. He develops, protects, and rewards his subordinates, and sets the example for them by living on base and wearing the fatigue uniform. The good leader is neither passive nor too involved in routine functions to prevent him from meeting the expectations of his superiors.

Research Question 2. To what degree is leadership indicated by these behaviors?

The answer is again found in Tables III and IV. The items in each table are listed in decreasing order of rating strength.

The relative degree of leadership indicated by any behavior can be determined by it relative position in the listing. Behaviors related to personal involvement of the BCE with CE operations and to active upward communication efforts by the BCE were rated most favorably. Conversely, actions that hinder communications or permit lax standards of appearance by CE personnel were rated as poor leadership quality. Items such as choice of duty uniform, use of a staff car, and personal management style appear to be unrelated to the leadership issue.

Research Question 3. To what degree to wing and base commanders agree concerning the definition of BCE leadership?

Ratings by wing commanders differed from base commander's ratings on only two items. On item 8: "The BCE is protective of the CE work force.", each of the duty title groups differed significantly with the others. Base commanders and BCEs rated the behavior as good (+1.3 and +2.0 respectively), while wing commanders rated the action as not related to leadership (+0.5). In this case, the proximity of the rater to the personnel in the work force could be the moderating factor. The morale and support of the troops is vital to the BCE and important to the base commander. The wing commander, on the other hand, is less directly involved with personnel at the operating level.

Item 28: "The BCE consults with the CE staff before making most decisions." was rated +1.8 and +1.9 by wing commanders and BCEs respectively, but received a significantly lower rating of +1.2 by base commanders. For all other behavioral items the wing and base commanders' ratings agreed in both direction and degree. The base commander, in most situations, desires speedy results from the BCE. The wing commander deals more with strategic concerns that permit greater

time for decision making. The BCE, of course, wishes to make the best possible decision, and values every source of information.

Research Question 4. Is there a clear distinction between BCE leadership and non-leadership behaviors?

The results showed a definite distinction between good and poor leadership actions. Behaviors that remove the BCE from involvement in base activities, are passive, or negative in support of the commanders were considered poor quality leadership. Good leadership quality behaviors were characterized by action, communication, high military standards, and involvement with the base.

Research Question 5. How do the BCEs' definitions of leadership behavior compare to the views of their superiors?

The BCEs' overall ratings agreed, for the most part, with those of the wing and base commanders. On several items, however, the BCEs differed significantly from their superiors. Item 1: "The BCE personally visits most CE job sites." was rated at 1.6 by the BCEs, while wing and base commanders rated it at 2.6 and 2.4 respectively. Comments by BCEs indicated that it is desirable to visit job sites, but the sheer number of jobs handled by CE each day makes visiting most sites impossible. The BCEs did not want to be evaluated in terms of such an enormously time consuming task. Apparently the commanders rated the item on its theoretical merits rather than its practicality. The BCEs were also very conservative in rating the leadership quality inherent in where they live. Item 4: "The BCE lives off base," was rated poor (-2.0 and -1.7) by wing and base commanders, while BCEs rated such behavior only mildly poor (-1.1). The opposite of that behavior, Item 20: "The BCE lives on base.", was rated good (2.1 and 2.2) by wing

and base commanders, while BCEs rated it only mildly good (1.4). Generally, on issues of personal style, the BCEs tended to rate the items more toward the neutral or unrelated point than did the commanders. For instance, concerning wear of the fatigue uniform (Item 21), delegation of authority to the deputy (Item 25), assignment of reporting officials for junior officers (Item 34), and three-day pass policies (Item 37) the BCE was essentially neutral, compared to the commanders who rated the items in the mildly good to good range.

In identifying those actions most damaging to good leadership (Table VI), the BCEs' comments showed a distinctly different pattern from that of the other respondent groups. Wing commanders cited such actions as non-responsiveness, inaction, defensiveness, over reliance on civilians, and poor information gathering as most damaging to leadership. Their emphasis appeared to be on the BCE getting the job done for the commander. BCEs, on the other hand, considered inconsistency, favoritism, autocratic style, poor communications, and failure to protect subordinates as the most leadership damaging types of actions. The BCEs emphasis tended more toward people related activities.

Although statistical factor analysis of the behavioral items did not result in any distinct pattern of responses, analysis of the Part II data, together with the open-ended comments from Parts IV and V lead this researcher to identify two primary areas of activitiy that encompass wing and base commanders' perceptions of BCE leadership. Those two areas are:

-- Initiation of communication

-- Consideration of structure

The first area, initiation of communication, is indicated by behavior items 42, 11, 6, 31, 1, 14, 28, 30, and 12 from Table III. Each of these behaviors represents a form of active communication effort by the BCE. From the poor leadership behaviors listed in Table IV, items 43, 35, and 40 refer directly to a lack of communication initiative. Similarly, poor communication was identified most frequently by the respondents as a behavior damaging to good leadership (Table VI). Clearly, wing and base commanders want the BCE leader to initiate communication.

The other area, consideration of structure, involved a more subtle interpretation. The structure referred to is that of the base hierarchy of command and that of the military in general. Consideration refers to the acknowledgement, acceptance, and support of military structure and procedures and use of the local chain of command. Acting within that structure, as part of it, shows consideration for it. Again, from Table III, items 2, 41, 45, 36, 15, and 34 relate directly to support and acceptance of the base's and military's structure. Likewise, in Table IV, behaviors 26, 35, 39, and 4 indicate a low regard for structure. Prominent items in Table VI also relate to structure, including: non-responsiveness to command, poor discipline and standards, and over reliance on civilians. Even some comments from commanders in Part V of the survey involved the desire for consideration of structure. Wing commanders implied that the BCE should "know his place": that he should accept the fact that the commander sets base policy, not the BCE.

In summary, the research determined that wing and base commanders agree on which BCE behaviors indicate leadership. Those behaviors can be characterized by their results. One result expected by commanders

ı, the other result was accomplishment of projects
commanders' priority. These two results were
ı labels: initiation of communication and consideration
: course, the actual BCE behaviors and their individual
t the important findings of this research. The labels
ı of actions should not replace the richness of the

to the commanders' views, the BCEs tended toward a more
rpretation of leadership. High value was put upon
discipline and standards, but within the context of
tection of the work force. The factors from the early
rship studies, initiation of structure and
ppear to reflect how the BCEs identified leader

V. Conclusions and Implications

Introduction

The study results discussed in the previous chapter have considerable value. The significance of the various views of BCE leadership is explained in the next section. Following that, some possible applications of the knowledge gained from this study are outlined. The final section provides recommendations for further, follow-on research into the meaning and effects of BCE leadership.

Significance of Results

The study showed that wing and base commanders perceive BCE leadership differently than the BCEs themselves. For the commanders, it is the effect of BCE actions on overall CE performance that most influences the perception of leadership. For the BCEs, it is the effect of their actions on CE's personnel that is most important. Although many BCE actions affect both performance and personnel, there does not appear to be any conflict in the perceived leadership of those actions. The BCE can, for the most part, satisfy both his own expectations of leadership and those of his superiors with a single set of consistent behaviors. It seems that only the perception of the purpose for those behaviors will differ between the raters.

In terms of CE effectiveness, the results again showed little conflict. The BCE who attends to the criteria of leadership attributed to wing and base commanders, namely, initiation of communication and consideration of structure, can also attend to the more traditional leadership criteria of taking care of subordinates (consideration) and setting high standards by example (initiation of structure). Ignoring

one or the other criteria, however, can be expected to adversely affect the perception of effectiveness by the party whose criteria are not met. Thus, just as leadership is in the "eye of the beholder", so is effectiveness.

Uses and Implications of the Results

Knowing how CONUS wing and base commanders perceive leadership should help BCEs to understand the evaluation their actions by their immediate superiors. BCEs can also feel confident in initiating communication with their superiors, if even to receive greater feedback on performance. Furthermore, they can better understand and respond to their commanders' desires to have CE actions conform to established military structure. New BCEs, as well as experienced ones, should be able to benefit from the experience of others as expressed in the comments from Parts IV and V of the survey (contained in Appendices C and D). The relatively close agreement by all the respondents on the behavioral items of Part II, together with the apparent difference in leadership orientation by BCEs indicates a possible need for greater communication between BCEs and their superiors. This final conclusion is, perhaps, the key implication of this study.

Recommendations

While this research looked at the perceptions of BCEs and wing and base commanders, several other potential rating groups were omitted. Two important groups consist of the members of CE squadrons and the persons working in the CE command hierarchy, major command Deputy Chiefs of Staff for Engineering and Services and CE members of the Air Staff. The perceptions and opinions of these two groups together with the views

of the heads of other base-level agencies, when combined with the results of this study, would form a rather complete picture of the nature of BCE leadership. The combination of studies from each unique perspective would help define the manifold constraints and joint opportunities inherent in the BCE's job.

The comments from Parts IV and V suggest further avenues of study. Two respondents mentioned the importance of involvement of the BCE's spouse in CE and base activities. Of how great importance is such involvement? Also mentioned were the numerous constraints facing the BCE in the form of rules, resource limitations, and contracting requirements. What is the real impact of these factors on the BCE's performance? Finally, there remains the question of effectiveness and leadership perceptions of BCEs at overseas bases. In all, the study of BCE leadership remains a fruitful source of potentially valuable research projects.

APPENDIX A: Survey Questionnaire

The following ten pages contain the survey approval and the actual survey used to gather data for this study. The survey was entitled: Survey of Quality of Leadership in BCE Behaviors. The approval letter from the Research and Measurement Division of the Air Force Manpower and Personnel Center, Randolph AFB, Texas contained the survey control number (USAF SCN 84-40) as well as some suggested changes to the original questionnaire. The cover letter containing the Air Force Institute Of Technology (AFIT) letterhead and the seven pages of the questionnaire were sent out as a package to the survey population.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE MANPOWER AND PERSONNEL CENTER
RANDOLPH AIR FORCE BASE TX 78150

23 APR 1984

REPLY TO ATTN OF: MPCYP

SUBJECT: Survey of Quality of Leadership in BCE Behaviors

TO: AFIT/ED (Lt Col Testas)

1. The survey approval request for Survey of Quality of Leadership in Base Civil Engineer Behaviors, submitted for 1Lt Haenisch, is approved. The assigned survey control number is USAF SCN 84-40, which expires 31 Dec 84. Please have the survey control number placed on the front of the survey.

2. Please also remove all references to the Privacy Act Statement. We understand that the Privacy Act is not to be used unless the respondent's name and social security number are specifically requested.

3. This survey is a well-constructed instrument and reflects the attention of both Lt Haenisch and his thesis advisor, Capt Ben Dilla. We feel, however, that the questionnaire could benefit from the incorporation of a few suggested changes (we have enclosed a copy of the instrument with these suggestions annotated on it):

a. paragraph 2 of the cover letter is a bit choppy and might be smoothed out a bit.

b. question I 1. should be reworded as shown.

c. some of the words in Part II are emotionally laden and you should consider replacing them with more neutral choices. For example, "liberal" in II 26 might be changed to "flexible", "permissive", or the like. Other minor wording changes in the questions are as listed.

d. suggest full anchoring of the response options for Part III. This will insure consistency and better spacing of options for the respondent. We suggest the following set of anchors:

	Very Low Value	Low Value	Some Value	High Value	Very High Value
0	1	2	3	4	5

Not Related

e. you may want to provide some lines for the respondent to use in making comments for Part IV and Part V.

4. Once again, we feel the survey is well-written, and should provide you with valid and reliable data. We would like to see a final copy of the survey booklet if you would please provide us with one. Good luck on your project. If you have any questions or comments, please direct them to Capt Fred Gibson, (512)650-5811.

FOR THE COMMANDER

JOHN A. BALLARD, Maj, USAF
Acting Chief, Research &
Measurement Division

1 Atch
Revised Questionnaire

cc: 1Lt Jerry P. Haenisch

Dear Commander,

Last year, graduate students of the Air Force Institute of Technology (AFIT) surveyed wing, base, and Civil Engineering (CE) squadron commanders to determine those criteria important to overall CE effectiveness. Leadership was mentioned most often. The attached questionnaire is part of a follow-up study to determine just how the Base Civil Engineer (BCE) demonstrates leadership. As a senior manager, your evaluation of BCE actions is very important. With your help a profile of the BCE leader will be developed.

The questionnaire requests your judgment concerning the leadership quality inherent in a variety of possible BCE behaviors. Wing, base and civil engineering commanders at most AF bases in the CONUS will receive this survey; your participation is entirely voluntary, and your anonymity is assured. I appreciate your help in completing the questionnaire and returning it in the envelope provided within 14 days of receipt. Thank you for your time and consideration.

JERRY P. HAENISCH, CPT, USAF
AFIT Graduate Student

2 Atch
1. Research Questionnaire
2. Self-Addressed Envelope

Please take a few minutes to complete the attached questionnaire. This thesis effort will be especially helpful to Base Civil Engineers as well as wing and base commanders in improving the effectiveness of civil engineering units throughout the CONUS; in addition, you will help the student complete a vital educational objective. Thank you for your assistance.

LARRY L. SMITH, Colonel, USAF
Dean
School of Systems and Logistics

USAF Survey Control Number 84-40

Survey of Quality of Leadership in Base Civil Engineer Behaviors

The following questions will serve to categorize groups of respondents for statistical analysis. Your anonymity is assured as the data will not be used to identify individual bases or respondents.

Part I

1. To which Major Command do you belong? (Circle one)

   A. AFLC
   B. AFSC
   C. ATC
   d. MAC
   E. SAC
   F. TAC
   G. Other_____ (Please specify)

2. What is your base size (number of military and civilian personnel assigned)? (Circle one)

   A. Less than 5000
   B. 5000 - 7500
   C. More than 7500

3. What is your duty title? (Circle one)

   A. Wing commander
   B. Base/Combat Support Group commander
   C. Base Civil Engineer
   D. Other _____ (Please specify)

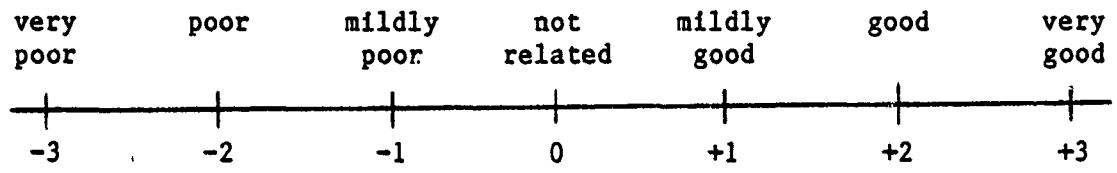
Part II

This portion of the survey contains a list of possible BCE behaviors. Please rate the quality of leadership demonstrated by each behavior by circling the appropriate number to the right of each statement. Scale values are shown below and at the top of each page. Please consider each statement in comparison to your concept of ideal BCE behavior. Space for additional comments is provided in parts IV and V.

Leadership Quality Scale

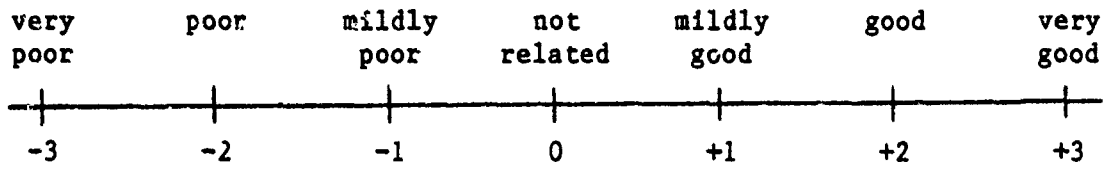
very poor	poor	mildly poor	not related	mildly good	good	very good
-3	-2	-1	0	+1	+2	+3

Leadership Quality Scale



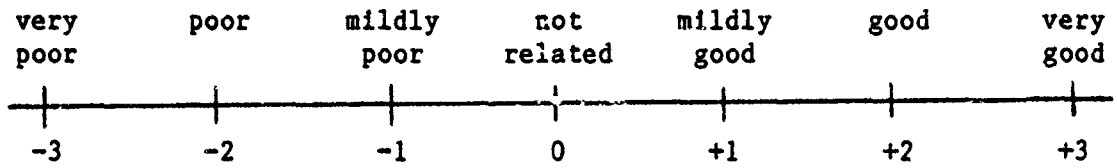
BCE Behaviors	Quality of Leadership
1. The BCE personally visits most CE job sites.	-3 -2 -1 0 +1 +2 +3
2. The BCE enforces strict adherence to AFR 35-10 standards by all military members of Civil Engineering.	-3 -2 -1 0 +1 +2 +3
3. The BCE and CE staff work together on a first name basis.	-3 -2 -1 0 +1 +2 +3
4. The BCE lives off base.	-3 -2 -1 0 +1 +2 +3
5. The BCE permits deviation from established working hours for highly productive non-union CE personnel.	-3 -2 -1 0 +1 +2 +3
6. The BCE publicizes CE activities through informational articles in the base newspaper.	-3 -2 -1 0 +1 +2 +3
7. The BCE keeps flexible organizational goals that are readily modified at CE staff meetings.	-3 -2 -1 0 +1 +2 +3
8. The BCE is protective of the CE workforce.	-3 -2 -1 0 +1 +2 +3
9. The BCE predominantly wears the dress blue uniform during the work week.	-3 -2 -1 0 +1 +2 +3
10. The BCE encourages shop and office luncheons during the work week.	-3 -2 -1 0 +1 +2 +3
11. The BCE initiates formal meetings to brief the wing and base commanders, and to clarify important issues.	-3 -2 -1 0 +1 +2 +3
12. The BCE brings subordinate staff members to most wing and base staff meetings.	-3 -2 -1 0 +1 +2 +3
13. The BCE drives the staff car for all of his on-base transportation.	-3 -2 -1 0 +1 +2 +3

Leadership Quality Scale



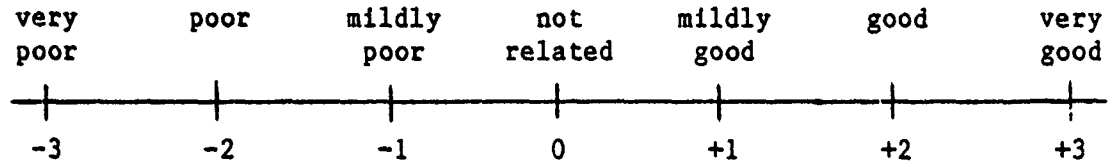
BCE Behaviors	Quality of Leadership
14. The BCE frequently meets socially with his peers on the base staff.	-3 -2 -1 0 +1 +2 +3
15. The BCE ensures that all CE personnel adhere strictly to established daily working hours.	-3 -2 -1 0 +1 +2 +3
16. The BCE is personally involved in all the routine decisions within CE.	-3 -2 -1 0 +1 +2 +3
17. The BCE conducts frequent open-ranks inspections of CE military personnel.	-3 -2 -1 0 +1 +2 +3
18. The BCE keeps formal, detailed goals and objectives that are reviewed only at quarterly staff meetings.	-3 -2 -1 0 +1 +2 +3
19. The BCE meets each crisis as it arises rather than relying on pre-established plans.	-3 -2 -1 0 +1 +2 +3
20. The BCE lives on base.	-3 -2 -1 0 +1 +2 +3
21. The BCE frequently wears the fatigue uniform to work.	-3 -2 -1 0 +1 +2 +3
22. The BCE is TDY from the base for meetings more than once per quarter.	-3 -2 -1 0 +1 +2 +3
23. The BCE relies heavily on staff summary sheets for the transfer of information to and from the wing and base commanders.	-3 -2 -1 0 +1 +2 +3
24. The BCE puts decision making authority at the lowest possible level in the CE organization.	-3 -2 -1 0 +1 +2 +3
25. The BCE permits his deputy to manage most of the operational functions of the CE activity.	-3 -2 -1 0 +1 +2 +3
26. The BCE permits relaxed appearance standards for the most productive personnel within CE.	-3 -2 -1 0 +1 +2 +3
27. The BCE signs more than the base average of letters of commendation and appreciation.	-3 -2 -1 0 +1 +2 +3

Leadership Quality Scale



BCE Behaviors	Quality of Leadership
28. The BCE consults with the CE staff before making most decisions.	-3 -2 -1 0 +1 +2 +3
29. The BCE is the primary reporting official for all officers within CE.	-3 -2 -1 0 +1 +2 +3
30. The BCE uses informal meetings to establish plans and transfer information to and from the wing and base commanders.	-3 -2 -1 0 +1 +2 +3
31. The BCE frequently invites the wing and base commanders to visit the CE area.	-3 -2 -1 0 +1 +2 +3
32. The BCE uses a personal auto for most of his on-base transportation needs.	-3 -2 -1 0 +1 +2 +3
33. The BCE maintains a generous three-day pass policy which is implemented by CE's senior NCOs.	-3 -2 -1 0 +1 +2 +3
34. The BCE ensures that senior CE officers are reporting officials for junior CE officers.	-3 -2 -1 0 +1 +2 +3
35. The BCE seldom attends base-level functions (i.e., parades, speeches, open houses).	-3 -2 -1 0 +1 +2 +3
36. The BCE is formal in the use of military titles and courtesies.	-3 -2 -1 0 +1 +2 +3
37. The BCE has established strict criteria for three-day passes and other rewards, and maintains personal control over such programs.	-3 -2 -1 0 +1 +2 +3
38. The BCE relies upon project officers to manage most of CE's major work.	-3 -2 -1 0 +1 +2 +3
39. The BCE seldom inspects CE personnel.	-3 -2 -1 0 +1 +2 +3
40. The BCE meets with other base staff members only in formal meetings.	-3 -2 -1 0 +1 +2 +3

Leadership Quality Scale

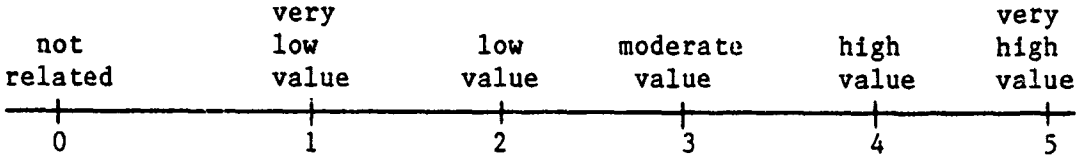


BCE Behaviors	Quality of Leadership
41. The BCE anticipates the desires of the wing and base commanders, and acts accordingly.	-3 -2 -1 0 +1 +2 +3
42. The BCE agressively presents the CE position at wing and base staff meetings.	-3 -2 -1 0 +1 +2 +3
43. The BCE keeps CE activities out of the base newspaper to the greatest extent possible.	-3 -2 -1 0 +1 +2 +3
44. The BCE delays decision making until the issues have been reviewed by all agencies or persons involved.	-3 -2 -1 0 +1 +2 +3
45. The BCE ensures that special interest projects receive close attention by CE managers.	-3 -2 -1 0 +1 +2 +3

Part III

The items in this section refer to criteria of civil engineering effectiveness. Please rate each item for its relative usefulness as an indicator of overall BCE leadership. Circle the appropriate number to the right of the item. Use the following scale:

Rating of Criteria as Leadership Indicator



Effectiveness Criteria	Indicator Value
1. Dress and appearance of CE personnel.	0 1 2 3 4 5
2. Compliance with budget.	0 1 2 3 4 5
3. Appearance of the base.	0 1 2 3 4 5

Rating of Criteria as Leadership Indicator

not related	very low value	low value	moderate value	high value	very high value
0	1	2	3	4	5

Effectiveness Criteria	Indicator Value
4. Results of IG inspections.	0 1 2 3 4 5
5. Results of Operational Readiness or other performance inspections.	0 1 2 3 4 5
6. Number of CE related articles in the base newspaper.	0 1 2 3 4 5
7. Size in dollars of the Military Construction Program (MCP) relative to prior years.	0 1 2 3 4 5
8. Participation of CE personnel in base level sports competition.	0 1 2 3 4 5
9. Number of awards presented to CE personnel.	0 1 2 3 4 5

Part IV

Please list in this section those BCE actions that you have found to be most damaging to good leadership.

Part V

Make any comments you wish concerning BCE leadership and its measurement in this section. Indicate any additional BCE behaviors that influence his or her quality of leadership.

Thank you for completing this survey. If you have any questions concerning the survey or the research project of which it is part, you may contact Capt Haenisch at AUTOVON: 785-4437. Please return the survey booklet in the enclosed envelope, pre-addressed to:

AFIT/LSB (CPT. Dilla)
Wright-Patterson AFB, OH 45433

APPENDIX B: Statistical Programs and Data List

The following program was used to analyze the survey data. The program was run on the AFIT CYBER computer using the Statistical Package for the Social Sciences (SPSS) routines.

```
RUN NAME          BCE LEADERSHIP
PRINT BACK        CONTROL
VARIABLE LIST     COMMAND, SIZE, JOB, Q1 TO Q45, IND1 TO IND9
INPUT MEDIUM      CARD
N OF CASES        160
INPUT FORMAT      FIXED (57F1.0)
MISSING VALUES    COMMAND, SIZE, JOB (0)/ Q1 TO Q45,
                  IND1 TO IND9 (9)
VAR LABELS        SIZE, BASE SIZE/ JOB, DUTY TITLE/ IND1, WORK
                  FORCE APPEARANCE/ IND2, BUDGET COMPLIANCE/ IND3,
                  BASE  APPEARANCE/ IND4, IG INSP/ IND5, ORI INSP/
                  IND6, NEWS REPORTS/ IND7, MCP SIZE/
                  IND8, SPORTS PARTICIPATION/ IND9, CE AWARDS
VALUE LABELS      COMMAND (1)AFLC (2)AFSC (3)ATC (4)MAC (5)SAC
                  (6)TAC (7)SPACE COM OR AU
                  (8)USAFA, AFRES, OR AFRC/
                  SIZE (1)LESS THAN 5000 (2)5000-7500 (3)MORE THAN
                  7500/ JOB (1)WING OR AIR DIVISION (2)BASE OR CSG
                  (3)BCE/ Q1 TO Q45 (1)VERY POOR LEADERSHIP (4)NOT
                  RELATED (7)VERY GOOD LEADERSHIP/ IND1 TO IND9
                  (1)LOW VALUE INDICATOR (5)HIGH VALUE INDICATOR
FREQUENCIES       INTEGER = COMMAND, SIZE, JOB, Q1 TO Q45, IND1
                  TO IND9 (0, 10)
OPTIONS           3,6,8
STATISTICS        ALL
CONDESCRIPTIVE    Q1 TO Q45, IND1 TO IND9
STATISTICS        ALL
*RECODE           SIZE (2=0) (3=2)
T-TEST            GROUPS=SIZE/ VARIABLES=Q1 TO Q45, IND1 TO IND9
*RECODE           SIZE (1=0) (2=1) (3=2)
T-TEST            GROUPS=SIZE/ VARIABLES=Q1 TO Q45, IND1 TO IND9
*RECODE           SIZE (3=0)
T-TEST            GROUPS=SIZE/ VARIABLES=Q1 TO Q45, IND1 TO IND9
*RECODE           JOB (3=0)
T-TEST            GROUPS=JOB/ VARIABLES=Q1 TO Q45, IND1 TO IND9
*RECODE           JOB (1=0) (2=1) (3=2)
T-TEST            GROUPS=JOB/ VARIABLES=Q1 TO Q45, IND1 TO IND9
*RECODE           JOB (2=0) (3=2)
T-TEST            GROUPS=JOB/ VARIABLES=Q1 TO Q45, IND1 TO IND9
READ INPUT DATA
FINISH
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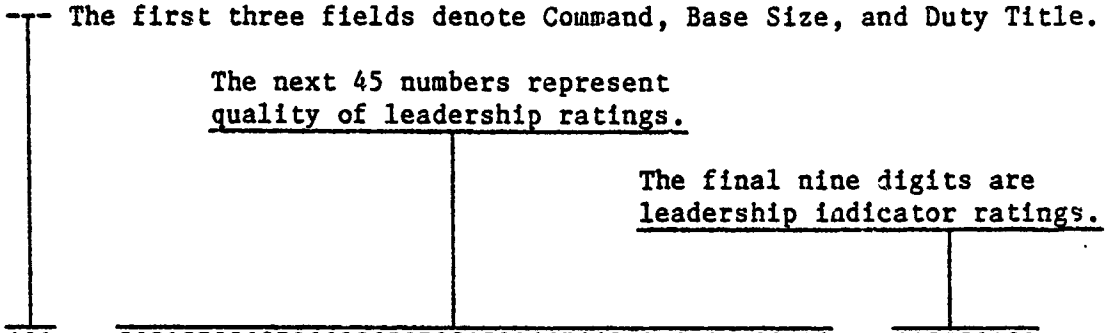
The data was entered in fixed format using 57 data fields with no extra spaces. Spaces are inserted in the sample data entries below to permit an explanation of the grouping of the data fields. The actual data listing follows the explanation.

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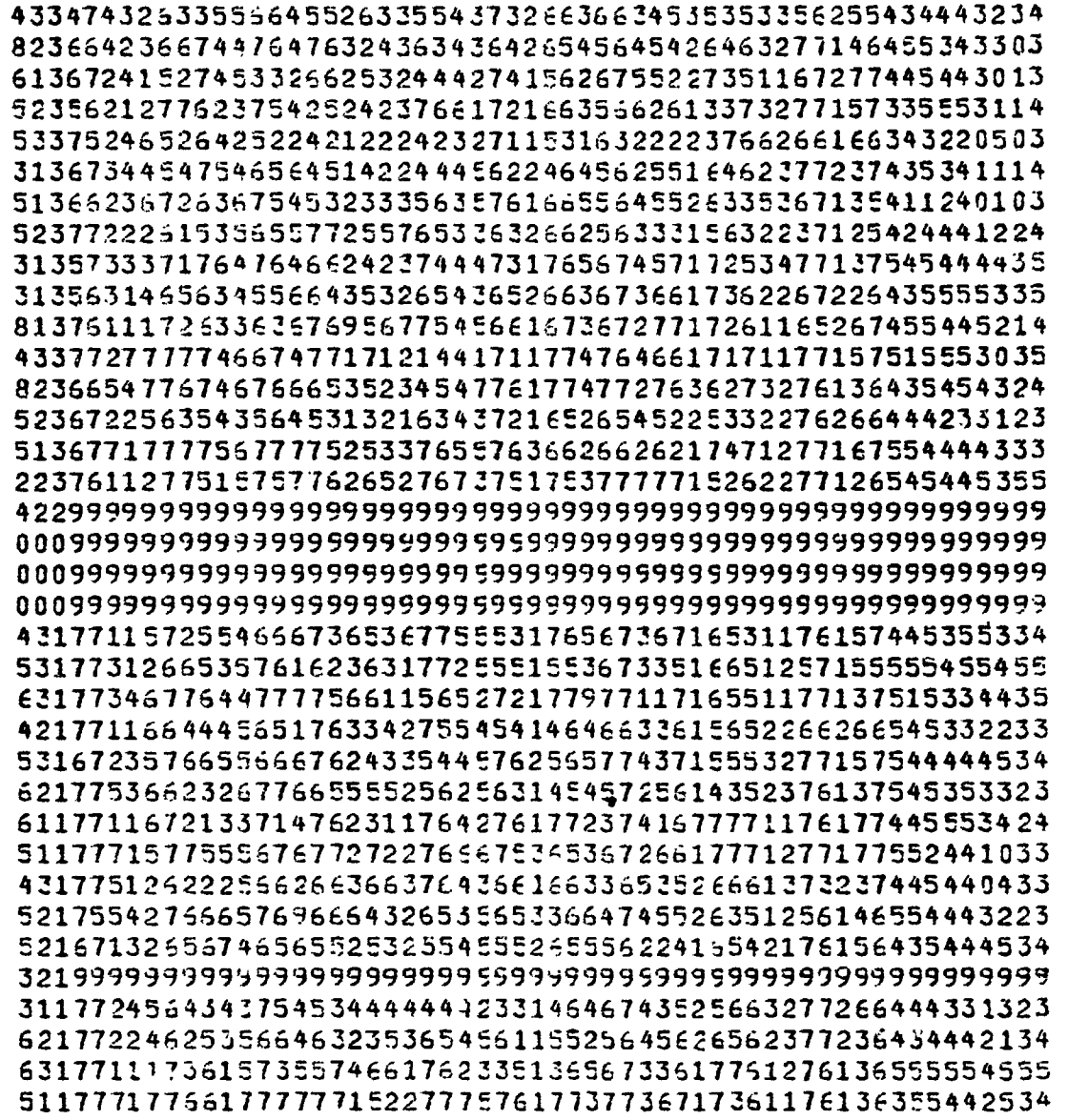

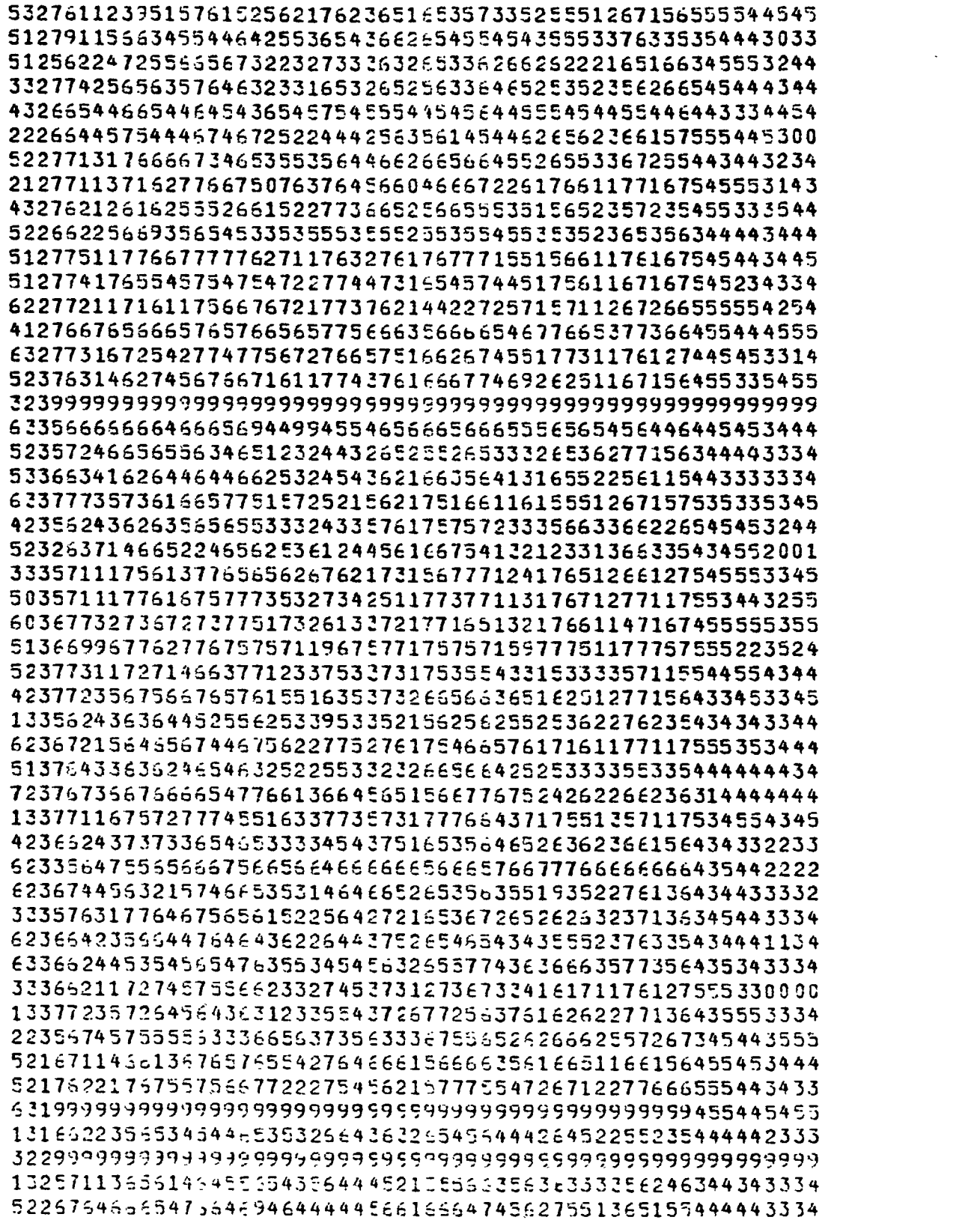

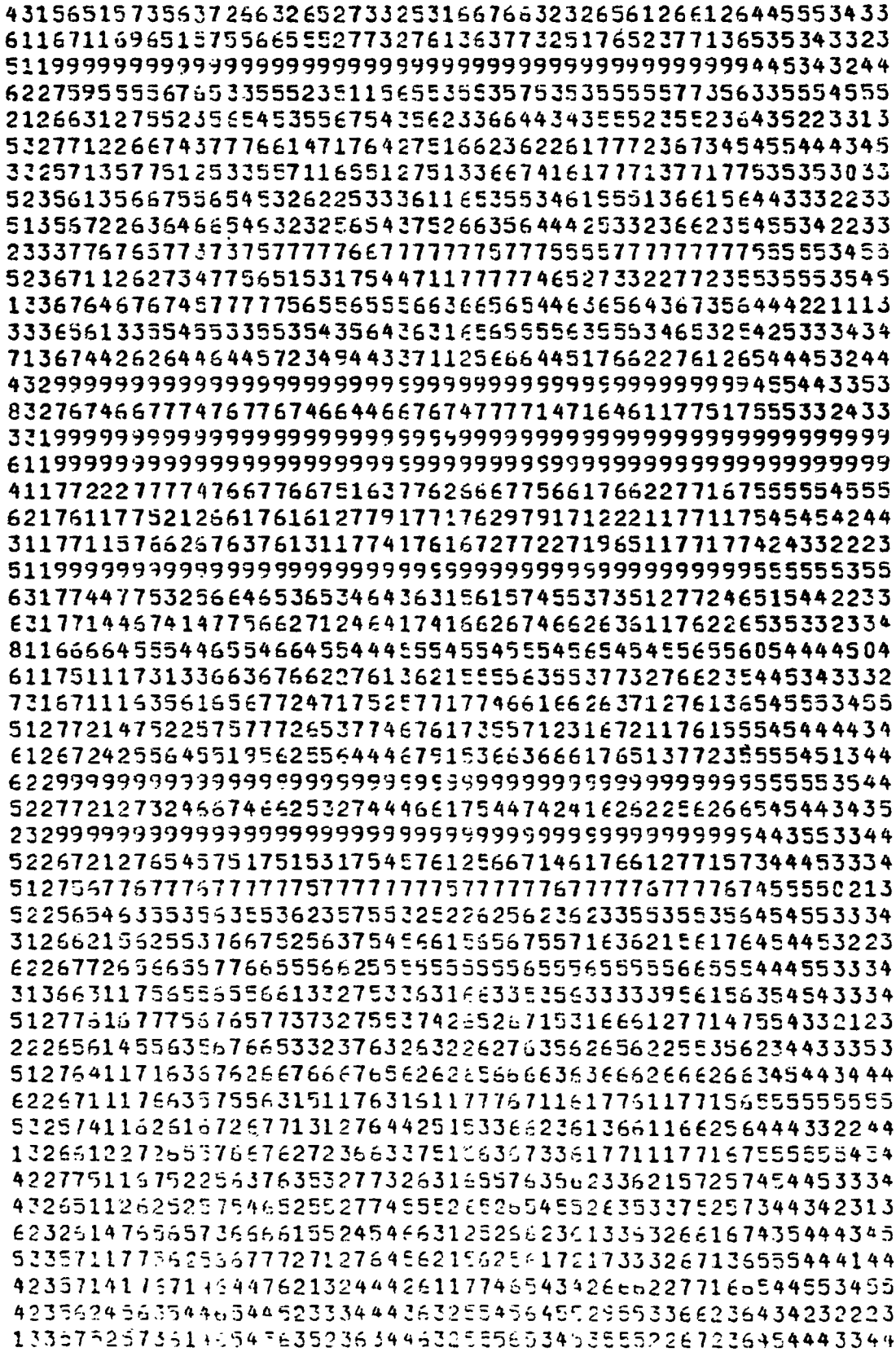

APPENDIX C: Written Responses To Survey Part IV

The following comments were written by the survey respondents in answer to the request in Part IV: "Please list in this section those BCE actions that you have found to be most damaging to good leadership." The anonymous statements have been edited only for spelling and grammar.

Wing and Air Division Commanders

-- Inaction - failure to get things done.

* * *

-- Allowing a civilian deputy CE to become excessively influential because of tenure.
-- Allowing slow-leak underlings to give soft support to committees such as Energy, Environmental Protection, etc.

* * *

-- BCE's superiors constantly changing CE priorities.
-- BCE's failure to be involved - out and about at work sites, shops, and social events, etc.
-- BCE being a one man show - an autocratic leader.

* * *

-- No personal on-site involvement.
-- Not being in tune with senior leadership and command policies.
-- Not keeping his staff informed of the command policies.

* * *

-- Procrastination brought about by a lack of knowledge. Many of our BCEs today are new to the career field. When a decision is required they must consult with the experts back in CE. They have no civil engineering experience to draw upon.

* * *

-- The defensive crouch.
-- Failure to get out from behind the desk.
-- Hopeless workload.
-- Passing information to the wing/CC only when requested rather than taking the initiative.
-- Negativism.

* * *

-- Not developing junior officers in officership qualities as well as engineering qualities.

* * *

-- Defensive nature.

* * *

-- Failure to work the senior commander's priorities.
-- Failure to discipline the civilian work force.
-- Failure to have a strong planning section.
-- Failure to set achievable organizational goals.
-- Failure to know (in detail) what the unit is doing.
-- Failure to be a strong spokesman for CE issues.

* * *

-- Taking refuge in regulations to avoid badly needed work.
-- letting the established civilian work pace and supervision continue as entrenched "business as usual".
-- Looking for reasons not to do work, rather than ways to get it done correctly.

* * *

-- Failure to communicate wing/base goals to subordinates.
-- Failure to get control of the senior level civilian work force.

* * *

-- Poor personnel management techniques - poor human relations.

* * *

-- Inability to communicate well.
-- Lack of firm policies and guidance.
-- Telling the wing/CC "What he wants to hear!".
-- Not properly advising senior base managers concerning construction projects.

* * *

-- Overwork and undermanning - Significant growth in the base with no increase in manning.
-- Unfunded authorizations.

* * *

-- Inability to develop projects/MCP in time to meet programming and budgeting cycles.
-- Lack of a strong multi-year housing repair upkeep program.

* * *

-- Delay in putting the axe to non-productive civilian employees.

* * *

-- Not being aware of the status of high interest projects and areas.
-- Personal involvement needs to be high.

* * *

-- Being lax on appearance standards for his people and the base.
-- Being unable to prioritize or delegate.
-- Rigid adherence to guidelines and previous practices. He must make facility improvements happen.

* * *

-- The BCE sets up his own shop and is not responsive to command policies and goals.

* * *

-- The idea that civilians determine the course of events since they are "permanent."
-- The idea that the BCE cannot run the organization because of the dominance of civilian employees.
-- The idea that military standards of dress and appearance do not apply to engineers.

* * *

-- Allowing standards to slide.
-- Allowing the civilian work force to "take over" most leadership positions. This causes a "slow down" in training key military members for wartime positions.

* * *

-- Non-participative style.
-- Failure to serve as the role model in appearance and human relations.
-- Reactive vs proactive style.
-- Arbitrary treatment - decisions are not based upon the merits of the case.
-- Always in a "defensive crouch" with a ready alibi or excuse.
-- Consistently reacts with reasons why something can't be done rather than operating positively within the letter and spirit of the law.

* * *

-- Inattention to discipline and indifference to standards of behavior.
-- Apathy toward a base-wide facility problem.
-- Technocrat approach vs a military approach.

* * *

-- Not getting involved.
-- Not being micro informed.
-- Not providing feedback to the command element.
-- Not enforcing standards.
-- Not developing long range (5 year) plans.

* * *

-- Failure to follow "special interest" projects personally.
-- Excessive reliance on long term civilian employees.
-- Not getting out with the troops in shops, yard, jobs, etc.
-- Failure to keep his boss informed.

* * *

-- Failure to recognize the mission of the installation and what it is necessary to support. Too often BCEs get bogged down in bureaucratic matters and lose sight of the reason the installation operates.

* * *

Base and Combat Support Group Commanders

-- The BCE must be consistent in his management of CE.
-- Getting too close to civilian managers can be damaging.

* * *

-- Making promises for work accomplishment, and then not doing it.
-- Making excuses to cover up lack of planning.
-- Shifting the work force to jobs that are not in the best interest of the base as a whole.
-- One of the most damaging actions that a BCE can do is to respond to a critical question concerning CE plans, programs, and work orders and provide the wrong answer.

* * *

-- Not being responsive or timely in production.
-- Lack of follow up for a job partially completed.
-- Not being able to manage numerous projects simultaneously. Other programs do not get adequate emphasis.

* * *

-- Favoritism to the troops.
-- Not being able or being unwilling to explain mission impact to the troops.
-- Spending an inordinate amount of time on HELP (High Emotion, Low Priority) projects.

* * *

-- Micro managing
-- Not being services oriented.

* * *

-- Having a negative attitude toward new ideas.
-- Not knowing the business.
-- Not having the knowledge/guts to say No.

* * *

-- Micro management.
-- Over reliance on young officers vice senior NCOs.

* * *

-- Not responsive to base/wing commanders' requests.
-- Being introverted, self-serving, dishonest, and not people oriented.

* * *

-- Overcentralization of decision making authority.
-- Public fault finding or abuse of personnel.
-- Over protection of CE personnel's errors.
-- Unwillingness to admit or recognize errors and then move smartly to remedy the mistake.

* * *

-- Not maintaining high standards of ethics, discipline, and morale.

* * *

-- Failure to enforce standards of dress and appearance.
-- Failure to communicate. If it can't be done on time, say why.

* * *

-- Inability to establish priorities.
-- Inattention to detail.
-- Reluctance to tangle with GS-level supervisors.

* * *

-- Not having clearly defined goals.
-- Being unwilling to meet with squadron commanders to discuss their problems.
-- Not setting high standards and enforcing them.

* * *

-- Inability to respond to short notice and special interest projects.
-- Poor follow-up and quality control.

* * *

-- Not knowing and articulating unit capabilities.
-- Inserting too many "rush" or "panic" jobs into the schedule.

* * *

-- Negativism. Everything appears bad to CE so that the answer is no before people talk to CE.
-- Not supporting wing functions or being part of the wing mission.

* * *

-- Failure to communicate.
-- Lack of responsiveness.

* * *

-- Relying too much on the opinions and desires of CE's top NCOs and not enforcing quality force standards.

* * *

-- Using first names all around.
-- Inconsistent discipline.
-- Lack of adherence to rules and regulations.
-- Lack of "common sense".

* * *

-- Not establishing time for his people.
-- Reacting to crises rather than anticipating problems.

* * *

-- Lack of knowledge of personnel issues such as: Quality force, disciplining processes, and inflation of performance reports.
-- Over protection of officers by disallowing non-CE additional duties or details.

* * *

-- Trying to do everything himself.
-- Not knowing the status of projects or work.
-- Not knowing his people.

* * *

-- Not making decisions.
-- Being too cautious.
-- Worrying about his OER rather than getting the job done.

* * *

-- Lack of aggressiveness in his area of responsibility.
-- Feeling sorry because he can't take the heat.

* * *

-- Being inflexible.
-- Poor military bearing and courtesies.
-- Lack of knowledge about what is going on.

* * *

-- Indecision and stonewalling.
-- Poor communication and paper wars.
-- Lack of imagination, motivation, adaptability, and plans.
-- Fear of outside personnel.

* * *

Base Civil Engineers

-- Inadequate decision making ability.
-- Too responsive.
-- Not willing to allow subordinates to manage.

* * *

-- Lack of a can-do attitude. Non-responsiveness.
-- Not appearing to care for your people.
-- Lack of visibility to your people.
-- Inconsistent levels of involvement (favoritism) or punishment.

* * *

-- BCE becoming too involved in the management/leadership responsibilities of subordinate supervisors.
-- Lack of recognition for subordinate accomplishments.
-- BCE that doesn't make himself available to assigned personnel.

* * *

-- Not supporting CE personnel in front of base/CC or other staff agency chiefs.
-- Getting in between two branch chiefs on important issues and not considering the needs of both branches.

-- Favoring one employee over another.
-- Delegating or assigning too much work to one person or function and not enough to another.
-- Exhibiting poor conduct which is visible to CE personnel (being late to work, taking long lunches, etc.).

* * *

-- Failure to enforce standards equally.
-- BCE who "uses" a unit for short term personal benefit.
-- Indecisiveness.

* * *

-- Allowing the base/wing CC to run CE.
-- Deviating from weekly schedules.
-- Giving directions to craftsmen on the job.
-- Not using the chain of command.

* * *

-- Too much of a "yes" man to senior commanders.
-- Makes all decisions without consulting his staff.
-- Makes no decisions.
-- Creates a sharp division between military and civilians.
-- Excessive absence from his duty station.
-- Considers CE assignment as degrading or below their dignity.

* * *

-- Trying to run a one-man operation.
-- Concentrating too much on contract projects.
-- Lack of consistency in enforcing discipline.

* * *

-- Crisis management on a day- to day level which results in poor planning and little sense of satisfaction.

* * *

-- Micro management.
-- Defensive nature.
-- Weak decision making.
-- Worry about personal career or OERs.

* * *

-- A working spouse who cannot fulfill her responsibility to the squadron.

* * *

-- Not having a wife, or having a wife who takes no interest in the welfare of the squadron or the condition of the base.

* * *

-- Not supporting the troops.

* * *

-- Not being visible to the squadron and the base.
-- Being too autocratic.
-- Publicly denouncing his people.
-- Wishy-washy in decision making.

* * *

-- Inconsistent actions.
-- Frequent wide swings in mood or temperament.
-- Failure to listen to advice (staff and below), or to hear both sides of the story.
-- Not keeping supervisors in the loop on disciplinary actions.

* * *

-- Inconsistent "anything". i.e., discipline, loyalty, rewards, etc., etc., etc.

* * *

-- Inconsistent punishment.
-- Not being customer oriented.

* * *

-- Inconsistency.
-- Lack of sympathy.

* * *

-- Showing different standards for the civilian work force.
-- High frequency of unprogrammed directed actions.

* * *

-- Poor communication with junior officers

* * *

-- Not delegating properly.
-- No communication or lack of communication with branch chiefs.
-- Not providing goals or direction.

* * *

-- Lack of communication with squadron members.
-- Not passing on praise to those who have done a good job.
-- Not taking action against those who don't follow the rules.
-- Not setting high standards.

* * *

-- Not keeping personnel informed.
-- BCE not following up on corrective actions in the self-inspection program.
-- BCE not getting around to the work areas enough.

* * *

-- Not keeping the troops informed. They need to know when and why you are doing "command interest" work.
-- Giving the impression that you are doing special things for your boss just to improve your standing; not for the good of the squadron.
-- Not being a good "buffer" for your branches when things are not going well.

* * *

-- Not maintaining good communications with the base commander and other base leaders.
-- Not seeking cooperation and communication from other base organizations indicating that their help is needed.

* * *

-- Over inspection of jobs, shops, and personnel - shows distrust.
-- Giving special favors.
-- Isolation. Not getting involved in base activities (mission, and informal or social).
-- Unwillingness to discuss an issue even when the answer is known (when the answer is unfavorable to the requestor).
-- Any perception of being unfair.

* * *

-- Allowing informality from younger airmen.
-- "Shooting from the hip".
-- Not listening to your people.
-- Not supporting your people.
-- Not demanding discipline and performance.
-- Not supporting the wing and base commanders.
-- Not articulating the BCE mission.
-- Not getting around the base.

* * *

-- Giving specialized treatment for rank, color or nationality.
-- Talking down to juniors.
-- Not informing the troops.
-- Poor personal behavior or character.

* * *

-- Predominance of civilians assigned. Should at least be a 50/50 split.
-- Civilian supervisors who don't insist on AFR 35-10 compliance by their military subordinates.

* * *

-- Inconsistency, aloofness, isolation, apathy, 8 to 5 mentality, indecisiveness, negative attitude, evident neglect of the troops, impulsiveness, and failure to compliment achievements.

* * *

-- Centralizing authority and elevation of decision making.
-- Lack of intermediate and long-term planning.
-- Separating responsibility for military and civilian personnel supervision.
-- Lack of decisiveness in decision making.
-- Failure to clearly communicate goals.

* * *

-- Paper involvement prevents adequate job visitation.

* * *

-- Lack of customer empathy and awareness.
-- Negative attitude toward problem solutions.
-- Lack of objectives and goals.
-- Lack of innovation and willingness to change.
-- Lack of caring about people.

* * *

-- Having low: standards, pride, motivation, enthusiasm, or productivity.

* * *

-- Lack of BCE presence in work areas and job sites.
-- Double standards in bearing, behavior, or appearance.
-- Allowing a "we vs they" attitude. i.e., between CE and other units, between military and civilians, or between engineering and the shops.

* * *

-- Failure of the BCE to communicate CE backlog and regulatory requirements.
-- Failure of the staff to follow up on commitments made by the BCE.

* * *

-- Not being involved and interested.
-- Condoning low or substandard performance.
-- Favoritism.

* * *

-- Poor standards of discipline - have a high standard and never waver.
-- Not establishing high goals and pounding them home daily.
-- Getting too close or personal with personnel.
-- Poor follow-up.
-- Allowing weak people to be hired.
-- Not rating poor people down, and pushing the best people to the top.

* * *

-- Lack of accessibility.
-- Poor personal behavior.
-- Non-support for customers.
-- Lack of rapport with base agencies.

* * *

-- Not leading by example.
-- Not participating in base activities.
-- Not insisting on high standards.
-- Not being highly visible with workers.
-- Not tackling the tough issues head-on.

* * *

-- Assuming that junior members can't do some really fine and demanding work.

* * *

-- Assuming that everything your people say is the truth. Being a "nice guy".

APPENDIX D: Written Responses To Survey Part V

The following comments were written by the respondents in answer to the request in Part V: "Make any comments you wish concerning BCE leadership and its measurement in this section. Indicate any additional BCE behaviors that influence his or her quality of leadership." The anonymous statements have been edited only for spelling and grammar.

Wing and Air Division Commanders

Good leadership in CE is not unlike good leadership in any military organization. The unit needs to know who you are, what you stand for, where you want the organization to go, and a program of rewards for both organizational and individual achievement.

A good BCE never forgets that he is running a service organization. He never forgets that commanders and not BCEs set major priorities and direction. He quickly learns how to use his technical expertise to "capture" his bosses.

A good BCE demands the discipline that is essential to any combat organization. He continually seeks pride, purpose, and professionalism. He is, in a sense, a coach who uses all the tricks of the trade to make individuals into team players who believe in themselves and in their mission.

* * *

-- Technical competence and a grasp of regulations required to properly control the work force for best results (job knowledge).
-- Ability to control funds and use them wisely for the base's benefit.
-- Rapport with HHQ/CE staff, credibility, ability to get things done for the base's benefit through the Majcom.
-- Relationship with contracting and the ability to specify desired outcomes in contractor performance so we get what we pay for.
-- Safety record both on and off duty for both military and civilian.

* * *

The BCE has one of the most demanding, if not the most demanding job at this base. No other single individual has to contend with the necessity to support everyone with regard to quality of life. This frequently leads to emotional involvement on the part of supported parties. It makes it IMPERATIVE that the BCE be mature and objective - even impervious to insult. KNOWLEDGE and MATURITY are both critical to the successful BCE.

* * *

-- Tough - gets the job done.

* * *

Priority of effort - we never have enough resources to accomplish everything. A superior BCE is able to focus the unit's attention on priority matters and satisfy customers with timely responses on essential items.

* * *

In many cases the BCE is a very good technical person, but lacks the leadership to be a squadron commander. This is a system fault since there is not an opportunity to develop leadership skills before being thrust into a BCE position.

Each commander has his or her own way of operating, and what may work for one may not work for another. Although this survey could give some good traits, it will still depend upon individual performance.

There should be a close relationship between the base/wing commander and the BCE due to the large program and impact CE has on a base. The relationship should not be the responsibility of the commander, but rather the BCE needs to keep the commander informed through formal and informal means, and when things go wrong - get the word out to prevent surprises.

* * *

Two of my three BCEs have been outstanding officers and engineers. One was BTZ to O-6 and his outstanding trait was technical competence and sure knowledge of all laws, regulations, and directives relative to the CE world. If something was possible he would find a way within the letter and spirit of all guidance. If it were not, he would state so clearly and forcefully and step on to the next project.

Alertness - a good BCE must be alert, aggressive, and unceasing in his approach to making his base a better place to live and work.

* * *

Base appearance is the report card for a commander and Base Civil Engineer. There will never be enough money. There will always be false efficiencies. But there is no excuse.

The BCE must be a professional, knowledgeable about construction, repair, and funding. He must be a commander who cares for his people, motivates their efforts, and requires tops in appearance and courtesy. He must be an optimist who takes little respite in past deeds and achievements, who recovers from criticism and who thrives on the challenge of an impossible backlog.

I am blessed with a great BCE. I draw strength from his courage and willingness to get done what needs to be accomplished. I know well the difference between a good and bad BCE, I just fired the latter to get the one I have now. I'll do my utmost to get the current BCE top jobs and future promotions. As a general officer I can help.

* * *

-- Needs to be informed and develop a plan.
-- Needs to motivate his people, especially civilian employees, to follow the plan.
-- Needs to be "active" not just "reactive".

* * *

-- Ability to communicate the requirements of CE in achieving work projects.
-- Planning ahead for various contingencies that impact a project. For example, plan and budget to move people out of housing for short periods to accomplish renovations.

* * *

Not all BCEs keep the commander informed on MCP projects. Update briefings must be accurate.

* * *

Base and Combat Support Group Commanders

The BCE needs to be positive, action-oriented, enthusiastic, with a can-do attitude. He must have a lot of pride and communicative ability to relate well with the base. He must be able to convince the major command and political delegation of pending needs. He must know PPBS and be expert in knowledge of how MCP projects move through HHQ/USAF and congress. Add to this a people oriented person with the highest ethics.

* * *

The BCE can't do it all. He must use his staff and gain their support. The BCE should have a headquarters section commander to handle routine actions.

* * *

-- Know the capabilities of each senior NCO and officer, then let them have room to act within their capabilities.

* * *

Loyalty! The CE commander works for the Base or Combat Support Group commander, and he must work for him. However, he must also keep the Base commander from doing dumb things - just because he is the Base commander and would like to see it doesn't make it right. The BCE needs the experience, tact, and knowledge to tell the base commander when he is wrong: when there is a better way. In other words, he cannot be a "yes-man".

* * *

-- The BCE must be part of the wing, involved in the wing, attend standups, and be reasonable, ready to discuss things.

* * *

Base Civil Engineers

Gentlemen, frankly, I disagree with the thesis that CE effectiveness is determined by the BCE's leadership. While important, effectiveness as measured by the Wing commander is evidenced by survival facilitated by responsiveness, and that's spelled politics. Unfortunately, no matter how "good" the work force is or how many dollars of project funds are gained for the base, if the BCE is not seen as responsive to every whim of the senior staff, is not viewed as a team player, is not considered in support of the Wing commander's views, he will not be considered an effective BCE. No matter how senior his grade he is seen as a "junior" senior officer, and has little leverage in base events. Thus, the squadron's success rate is combination of middle management leadership of the staff and shop troops, and the political acumen of the BCE.

As for the questions posed earlier to characterize leadership, I found them very naive and superficial. Reverse the ten "damaging" characteristics I've listed [inconsistency, aloofness, isolation, apathy, 8-5 mentality, indecisiveness, negative attitude, evident neglect of the troops, impulsiveness, and failure to compliment achievements] and you'll have the main elements of the perceived image as seen by the troops, which is the true measure of the BCE's in-house effectiveness. If he is not seen by the troops as fully in touch with their problems, as appreciative of their efforts, or supportive of their needs, no amount of meetings, car driving, fatigue wearing, or 35-10 compliance will ever gain their support and effective work production.

* * *

-- The BCE must maintain good formal and informal communications with all personnel in the squadron.
-- He must publicly support the senior BCE staff, officers, and NCOs.
-- He needs to be visible and accessible to CE personnel.
-- He must promptly correct transgressions by CE personnel and maintain strict discipline.
-- He must never shirk duties or responsibilities.

* * *

The biggest problem I see with this survey is an apparent failure to differentiate between management and leadership, the two are not synonymous nor interchangeable. Many of the questions posed as indicators of "leadership" are more appropriate indicators of management abilities or effectiveness. The effectiveness of a CE unit depends upon both leadership and management. Some of the factors addressed herein may be signs of good management, which may increase the CE unit's effectiveness, but still not be a sign of good leadership.

* * *

Leadership is a much studied subject. Most will agree that the classical attributes, such as integrity, honesty, etc., are important. However, no leader has exactly the same qualities as another. In other words, leadership is an individual concept.

A BCE is no less of a leader than are the president, CSAF, wing commander, etc. I feel that a BCE's leadership effectiveness is measured by his superiors, peers, and employees against getting work done on the base. The BCE who gets special projects done, responds well to emergencies, and has a pretty happy work force will be labeled a good leader. Few of the other measures of good leadership will enter into the discussion if the BCE fails to get the necessary work done.

* * *

Are you sure you haven't got the words "management" vs. "leadership" in mind?

* * *

-- The CE management information system stinks. BEAMS has always been an after-the-fact system, and evolution of a new system is taking forever.

* * *

-- The BCE must back the actions and decisions of assigned personnel.
-- Actions for reward and punishment must be firm but fair, and be within reason. Treatment must be the same for both military and civilian personnel.
-- Assigned personnel and supervisors must do the work they are paid for; the BCE should only monitor, not do it for them.
-- The BCE should not show any sign of favoritism for any one officer, supervisor, or branch. Everybody is a member of the "team".

* * *

-- The BCE must reward his people.

* * *

The BCE is a commander for 95% of his job. It is hard for BCEs to get used to because, normally, it is the first time they have had command authority.

* * *

-- A successful BCE sees what needs to be done, and does it before the wing or base commander demands it.
-- His squadron must have pride of accomplishment.
-- A successful BCE puts mileage on his staff car.

The BCE must be visible and available to the troops. They don't expect him to know everyone by name, but they take pride in seeing him out and around.

* * *

Involvement of the BCE's spouse in squadron activities, CE wives' functions, as well as wing and base social events is important. A working BCE wife cannot fulfill her responsibility. The BCE must dedicate himself or herself to being available to squadron personnel 7 days a week, 24 hours a day. He must communicate personally to all levels of his squadron. He must use squadron functions (top-3, unit advisory council, senior and junior one-on-one discussions) to feel the pulse and then take action. The BCE must first be a squadron commander who takes care of his people; second, he is the Base Civil Engineer.

* * *

This survey misses lots of important areas: manpower, design targets, personnel levels, etc., while dwelling on trivia. I can't believe this could be useful for anything.

* * *

BCE leadership quality is only as good as the people, all the people, military and civilian, and how you treat them. Positive strokes, when deserved, work wonders.

* * *

The successful resolution of problems has been indicated as the essence of sound leadership. The BCE has no shortfall of problems, and he or she must deal with each one with a fair and impartial attitude. Human relations is a must followed by money and material management.

* * *

-- Visit CE personnel at work sites.
-- Have monthly commander's call, Top-3 meetings, and enlisted advisor's meetings.
-- Have staff meetings.
-- Use management-by-objectives.
-- Praise people publicly.
-- Be firm, positive, and unwavering.
-- Manage by results.

* * *

The BCE must give as much time to "commandership" as to BCE duties.

* * *

Your survey was slanted toward traditional military standards which are good. We have many different attitudes, regulations, and authority over our civilian force compared to the military.

* * *

-- Read the Pulse Points for Managers issued initially in September 1976 by Major General Thompson. It is right on target.

* * *

-- Be positive in getting things done. Too often we are quick to find regs or reasons not to do work that other people want. Be positive, try when you can, and when you have to say "no" you will have more credibility.
-- Take an active interest in the careers of your young officers.

* * *

The BCE's time is too limited by meetings and squadron duties to allow him or her to get out to the work areas often enough.

* * *

A leader must earn the respect of his or her troops. He must have good military bearing and expect the same. A leader must also be sensitive to subordinate's needs and relate these to mission accomplishment. Visibility is a must, along with strong on-the-job feedback, both negative and positive.

* * *

I believe in the 9,9 style which is pro-job and pro-people. The job only gets done through people, therefore, people are necessary and must be willing to work.

In the military, leading people extends beyond the office. Social and sports events off-the-job are just as important as activities during duty hours. Recognition for the good performers along with encouragement to others helps to get the work performed. Fairness and consistency in discipline is vital.

* * *

The BCE's hands are, in large measure, tied. You are a support organization, yet you get very little support from other support organizations in getting the job done.

-- Personnel. Our top grades have been eliminated from northern bases. 80% of my senior NCO slots are filled by junior NCOs.

-- The rules are so tight and inflexible in contracting that progress is tough.

-- Transportation maintenance is almost comical when it comes to support of very important missions.

Despite all these hurdles, our BCEs seem to survive. Is it luck? No! It is leadership.

* * *

Taking care of your people, helping them grow, progress, and advance, that is important. Too often, military manhours are considered a free resource within CE. This leads to poor decision making. The CE career field needs to be lifted up in the prestige pyramid. Prime BEEF and wartime tasking need more emphasis. Too many BCEs do not deploy with their Prime BEEF teams which leaves a leadership vacuum at the top. Since BCE positions are only justified on wartime tasking, they should be first in line to participate in Prime BEEF deployments. Base and wing commanders need to be educated to the fact that the BCE is a war resource, not a grass cutting czar. The BCE's vehicle should be a four-wheel drive Jeep to distinguish his posture from other organization heads with their plush staff cars.

* * *

Too many BCEs I have known consider themselves engineers first, and officers second. I have attempted to council my officers that they are officers first and engineers second. Leadership is incumbent in the commander's position, yet many fail to fulfill that part of their role. You, yourself, in this questionnaire, refer to the individual as the BCE and not as the CE commander. That to me is most important.

* * *

-- Get the job done the first time.
-- Support your troops.
-- Use common sense.
-- Remember who you work for.
-- Honesty, integrity, and loyalty.
-- Establish one-on-one relationships with contracting, supply, transportation, and personnel.
-- Look for trends.
-- Enjoy what you are doing.
-- Appraise your own talent.
-- Demand accountability.
-- Establish priorities.
-- Recognize that followers need leaders.
-- Set the standard.
-- Handle the tough problems.
-- Indicate your appreciation.
-- Perform as a leader.

* * *

-- Be fair and consistent.
-- Have a comprehensive goals, incentive, and awards program.
-- Set high standards and insist on compliance.

* * *

I believe one expression of BCE leadership is the extent to which the BCE can gain the wing and group commanders' confidence, and be allowed to run his CE business. To a large extent this confidence level is closely related to the rapport which the BCE maintains with his MAJCOM DE staff.

* * *

Appearance of the base may not be valid as a leadership indicator when the BCE is at the mercy of a "not so hot" grounds maintenance contractor. When I had my own organic work force base appearance was super. A lousy contractor can ruin a BCE's career because we have very little control over him. Now the paint shop is being considered for contract!

When we talk about BCE leadership we must talk about being a commander. Some good engineers and BCEs are not commanders. They are just good at the technical engineering facets. As the BCE long hours of work are required. The commander must work these long hours as a sincere demonstration to his troops, or he will have a difficult time making them put in the extra effort. I know this very well, for I have put in numerous 55 to 70 hour work weeks with my troops following in my footsteps.

* * *

Very few of the indicators of performance measurement offered in this paper are directly usable or relate directly to the mission of the BCE, nor to what the CE squadron produces (base appearance excepted). Suggest you tie the measurement system more closely to AFR 85-10.

The first section on BCE behaviors is very interesting and applicable. More could be added. For example, percent of time spent in meetings within vs. outside of the squadron; percent of time spent on paperwork, MBWA, etc.

APPENDIX E: Mailing List

The following is the address list used to mail out the survey packages. Although some of the duty positions may not be currently filled or may not presently exist the list was deemed suitable to contact all possible respondents in the study's population.

BASE CIVIL ENGINEER (BCE)
ALTUS AFB, OK 73523

BASE CIVIL ENGINEER (BCE)
ANDREWS AFB, MD 20331

BASE CIVIL ENGINEER (BCE)
BARKSDALE AFB, CA 71110

BASE CIVIL ENGINEER (BCE)
BEALE AFB, CA 95903

BASE CIVIL ENGINEER (BCE)
BERGSTROM AFB, TX 78743

BASE CIVIL ENGINEER (BCE)
BLYTHEVILLE AFB, AR 72315

BASE CIVIL ENGINEER (BCE)
BOLLING AFB, DC 20332

BASE CIVIL ENGINEER (BCE)
BROOKS AFB, TX 78235

BASE CIVIL ENGINEER (BCE)
CANNON AFB, NM 88101

BASE CIVIL ENGINEER (BCE)
CARSWELL AFB, TX 76127

BASE CIVIL ENGINEER (BCE)
CASTLE AFB, CA 95342

BASE CIVIL ENGINEER (BCE)
CHANUTE AFB, IL 61868

BASE CIVIL ENGINEER (BCE)
CHARLESTON AFB, SC 29404

BASE CIVIL ENGINEER (BCE)
COLUMBUS AFB, MS 39701

BASE CIVIL ENGINEER (BCE)
DAVIS-MONTHAN AFB, AZ 85707

BASE CIVIL ENGINEER (BCE)
DOBBINS AFB, GA 30069

BASE CIVIL ENGINEER (BCE)
DOVER AFB, DE 19902

BASE CIVIL ENGINEER (BCE)
DYESS AFB, TX 79607

BASE CIVIL ENGINEER (BCE)
EDWARDS AFB, CA 93523

BASE CIVIL ENGINEER (BCE)
EGLIN AFB, FL 32542

BASE CIVIL ENGINEER (BCE)
ELLSWORTH AFB, SD 57706

BASE CIVIL ENGINEER (BCE)
ENGLAND AFB, LA 71301

BASE CIVIL ENGINEER (BCE)
FAIRCHILD AFB, WA 99011

BASE CIVIL ENGINEER (BCE)
F.E. WARREN AFB, WY 82001

BASE CIVIL ENGINEER (BCE)
GEORGE AFB, CA 92392

BASE CIVIL ENGINEER (BCE)
GOODFELLOW AFB, TX 76908

BASE CIVIL ENGINEER (BCE)
GRAND FORKS AFB, ND 58205

BASE CIVIL ENGINEER (BCE)
GRIFFISS AFB, NY 13441

BASE CIVIL ENGINEER (BCE)
GRISSOM AFB, IN 46971

BASE CIVIL ENGINEER (BCE)
GUNTER AFB, AL 36114

BASE CIVIL ENGINEER (BCE)
HANCOCK FIELD, NY 13225

BASE CIVIL ENGINEER (BCE)
HANSCOM AFB, MA 01731

BASE CIVIL ENGINEER (BCE)
HILL AFB, UT 84056

BASE CIVIL ENGINEER (BCE)
HOLLOMAN AFB, NM 88330

BASE CIVIL ENGINEER (BCE)
HOMESTEAD AFB, FL 33039

BASE CIVIL ENGINEER (BCE)
HURLBURT FIELD, FL 32544

BASE CIVIL ENGINEER (BCE)
KEESLER AFB, MS 39534

BASE CIVIL ENGINEER (BCE)
KELLEY AFB, TX 78241

BASE CIVIL ENGINEER (BCE)
KIRTLAND AFB, NM 87117

BASE CIVIL ENGINEER (BCE)
K.I. SAWYER AFB, MI 49843

BASE CIVIL ENGINEER (BCE)
LACKLAND AFB, TX 78236

BASE CIVIL ENGINEER (BCE)
LANGLEY AFB, VA 23665

BASE CIVIL ENGINEER (BCE)
LAUGHLIN AFB, TX 78843

BASE CIVIL ENGINEER (BCE)
LITTLE ROCK AFB, AR 72099

BASE CIVIL ENGINEER (BCE)
LORING AFB, ME 04751

BASE CIVIL ENGINEER (BCE)
LOWRY AFB, CO 80230

BASE CIVIL ENGINEER (BCE)
LUKE AFB, AZ 85309

BASE CIVIL ENGINEER (BCE)
MACDILL AFB, FL 33608

BASE CIVIL ENGINEER (BCE)
MALMSTROM AFB, MT 59402

BASE CIVIL ENGINEER (BCE)
MARCH AFB, CA 92518

BASE CIVIL ENGINEER (BCE)
MATHER AFB, CA 95655

BASE CIVIL ENGINEER (BCE)
MAXWELL AFB, AL 36112

BASE CIVIL ENGINEER (BCE)
MCCHORD AFB, WA 98438

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MCCELLAN AFB, CA 95652

BASE CIVIL ENGINEER (BCE)
MCCONNELL AFB, KS 67221

BASE CIVIL ENGINEER (BCE)
MCGUIRE AFB, NJ 08641

BASE CIVIL ENGINEER (BCE)
MINOT AFB, ND 58705

BASE CIVIL ENGINEER (BCE)
MOODY AFB, GA 31699

BASE CIVIL ENGINEER (BCE)
MOUNTAIN HOME AFB, ID 83648

BASE CIVIL ENGINEER (BCE)
MYRTLE BEACH AFB, SC 29577

BASE CIVIL ENGINEER (BCE)
NELLIS AFB, NV 89191

BASE CIVIL ENGINEER (BCE)
NORTON AFB, CA 92409

BASE CIVIL ENGINEER (BCE)
OFFUTT AFB, NE 68113

BASE CIVIL ENGINEER (BCE)
PATRICK AFB, FL 32925

BASE CIVIL ENGINEER (BCE)
PEASE AFB, NH 03801

BASE CIVIL ENGINEER (BCE)
PETERSON AFB, CO 80914

BASE CIVIL ENGINEER (BCE)
PLATTSBURGH AFB, NY 12903

BASE CIVIL ENGINEER (BCE)
POPE AFB, NC 28308

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RANDOLPH AFB, TX 78150

BASE CIVIL ENGINEER (BCE)
REESE AFB, TX 79489

BASE CIVIL ENGINEER (BCE)
ROBINS AFB, GA 31098

BASE CIVIL ENGINEER (BCE)
SCOTT AFB, IL 62225

BASE CIVIL ENGINEER (BCE)
SEYMOUR JOHNSON AFB, NC 27531

BASE CIVIL ENGINEER (BCE)
SHAW AFB, SC 29152

BASE CIVIL ENGINEER (BCE)
SHEPPARD AFB, TX 76311

BASE CIVIL ENGINEER (BCE)
TINKER AFB, OK 73145

BASE CIVIL ENGINEER (BCE)
TRAVIS AFB, CA 94535

BASE CIVIL ENGINEER (BCE)
TYNDALL AFB, FL 32403

BASE CIVIL ENGINEER (BCE)
USAF ACADEMY, CO 80840

BASE CIVIL ENGINEER (BCE)
VANCE AFB, CA 73702

BASE CIVIL ENGINEER (BCE)
VANDENBERG AFB, CA 93437

BASE CIVIL ENGINEER (BCE)
WESTOVER AFB, MA 01022

BASE CIVIL ENGINEER (BCE)
WHITEMAN AFB, MO 65305

BASE CIVIL ENGINEER (BCE)
WILLIAMS AFB, AZ 85224

BASE CIVIL ENGINEER (BCE)
WRIGHT-PATTERSON AFB, OH 45433

BASE CIVIL ENGINEER (BCE)
WURTSMITH AFB, MI 48753

BASE COMMANDER
ALTUS AFB, OK 73523

BASE COMMANDER
ANDREWS AFB,MD 20331

BASE COMMANDER
BARKSDALE AFB, CA 71110

BASE COMMANDER
BEALE AFB, CA 95903

BASE COMMANDER
BERGSTROM AFB, TX 78743

BASE COMMANDER
BLYTHEVILLE AFB, AR 72315

BASE COMMANDER
BOLLING AFB, DC 20332

BASE COMMANDER
BROOKS AFB, TX 78235

BASE COMMANDER
CANNON AFB, NM 88101

BASE COMMANDER
CARSWELL AFB, TX 76127

BASE COMMANDER
CASTLE AFB, CA 95342

BASE COMMANDER
CHANUTE AFB, IL 61868

BASE COMMANDER
CHARLESTON AFB, SC 29404

BASE COMMANDER
COLUMBUS AFB, MS 39701

BASE COMMANDER
DAVIS-MONTHAN AFB, AZ 85707

BASE COMMANDER
DOBBINS AFB, GA 30069

BASE COMMANDER
DOVER AFB, DE 19902

BASE COMMANDER
DYESS AFB, TX 79607

BASE COMMANDER
EDWARDS AFB, CA 93523

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EGLIN AFB, FL 32542

BASE COMMANDER
ELLSWORTH AFB, SD 57706

BASE COMMANDER
ENGLAND AFB, LA 71301

BASE COMMANDER
FAIRCHILD AFB, WA 99011

BASE COMMANDER
F.E. WARREN AFB, WY 82001

BASE COMMANDER
GEORGE AFB, CA 92392

BASE COMMANDER
GOODFELLOW AFB, TX 76908

BASE COMMANDER
GRAND FORKS AFB, ND 58205

BASE COMMANDER
GRIFFISS AFB, NY 13441

BASE COMMANDER
GRISSOM AFB, IN 46971

BASE COMMANDER
GUNTER AFB, AL 36114

BASE COMMANDER
HANCOCK FIELD, NY 13225

BASE COMMANDER
HANSCOM AFB, MA 01731

BASE COMMANDER
HILL AFB, UT 84056

BASE COMMANDER
HOLLOMAN AFB, NM 88330

BASE COMMANDER
HOMESTEAD AFB, FL 33039

BASE COMMANDER
HURLBURT FIELD, FL 32544

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KEESLER AFB, MS 39534

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BASE COMMANDER
TRAVIS AFB, CA 94535

BASE COMMANDER
TYNDALL AFB, FL 32403

CHIEF OF STAFF
USAF ACADEMY, CO 80840

BASE COMMANDER
VANCE AFB, CA 73702

BASE COMMANDER
VANDENBERG AFB, CA 93437

BASE COMMANDER
WESTOVER AFB, MA 01022

BASE COMMANDER
WHITEMAN AFB, MO 65305

BASE COMMANDER
WILLIAMS AFB, AZ 85224

BASE COMMANDER
WRIGHT-PATTERSON AFB, OH 45433

BASE COMMANDER
WURTSMITH AFB, MI 48753

COMMANDER, 443 MAW
ALTUS AFB, OK 73523

COMMANDER, 76ALD
ANDREWS AFB, MD 20331

COMMANDER, 2 BMW
BARKSDALE AFB, CA 71110

COMMANDER, 100 AFERW
BEALE AFB, CA 95903

COMMANDER, 67 TRW
BERGSTROM AFB, TX 78743

COMMANDER, 97 BMW
BLYTHEVILLE AFB, AR 72315

COMMANDER, 1100 ABW
BOLLING AFB, DC 20332

COMMANDER, AMD
BROOKS AFB, TX 78235

COMMANDER, 27 TFW
CANNON AFB, NM 88101

COMMANDER, 7 BMW
CARSWELL AFB, TX 76127

COMMANDER, 93 BMW
CASTLE AFB, CA 95342

COMMANDANT, CTTC
CHANUTE AFB, IL 61868

COMMANDER, 437 MAW
CHARLESTON AFB, SC 29404

COMMANDER, 14 FTW
COLUMBUS AFB, MS 39701

COMMANDER, 836 AD
DAVIS-MONTHAN AFB, AZ 85707

COMMANDER, 94 TAW
DOBBINS AFB, GA 30069

COMMANDER, 436 MAW
DOVER AFB, DE 19902

COMMANDER, 96 BMW
DYESS AFB, TX 79607

COMMANDER, AFFTC
EDWARDS AFB, CA 93523

COMMANDER, AD
EGLIN AFB, FL 32542

COMMANDER, 44 SMW
ELLSWORTH AFB, SD 57706

COMMANDER, 23 TFW
ENGLAND AFB, LA 71301

COMMANDER, 92 BMW
FAIRCHILD AFB, WA 99011

COMMANDER, 90 SMW
F.E. WARREN AFB, WY 82001

COMMANDER, 831 AD
GEORGE AFB, CA 92392

COMMANDER, 3840 TTWG
GOODFELLOW AFB, TX 76908

COMMANDER, 321 SMW
GRAND FORKS AFB, ND 58205

COMMANDER, 416 BMW
GRIFFISS AFB, NY 13441

COMMANDER, 305 AREFW
GRISSOM AFB, IN 46971

COMMANDER, 4789 ABG
HANCOCK FIELD, NY 13225

COMMANDER, ESD
HANSCOM AFB, MA 01731

COMMANDER, 833 AD
HOLLOMAN AFB, NM 88330

COMMANDER, 31 TTW
HOMESTEAD AFB, FL 33039

COMMANDER, 1 SOW
HURLBURT FIELD, FL 32544

COMMANDANT, KTTC
KEESLER AFB, MS 39534

COMMANDER, 1606 ABW
KIRTLAND AFB, NM 87117

COMMANDER, 410 BMW
K.I. SAWYER AFB, MI 49843

COMMANDER, 1 TFW
LANGLEY AFB, VA 23665

COMMANDER, 314 TAW
LITTLE ROCK AFB, AR 72099

COMMANDANT, LTTC
LOWRY AFB, CO 80230

COMMANDER, 56 TTW
MACDILL AFB, FL 33608

COMMANDER, 22 BMW
MARCH AFB, CA 92518

COMMANDANT, AU
MAXWELL AFB, AL 36112

COMMANDER, 381 SMW
MCCONNELL AFB, KS 67221

COMMANDER, 91 SMW
MINOT AFB, ND 58705

COMMANDER, 366 TFW
MOUNTAIN HOME AFB, ID 83648

COMMANDER, USAFTFWC
NELLIS AFB, NV 89191

COMMANDER, 3902 ABW
OFFUTT AFB, NE 68113

COMMANDER, 509 BMW
PEASE AFB, NH 03801

COMMANDER, 380 BMW
PLATTSBURGH AFB, NY 12903

COMMANDER, 12 FTW
RANDOLPH AFB, TX 78150

COMMANDER, 375 AAW
SCOTT AFB, IL 62225

COMMANDER, 363 TRW
SHAW AFB, SC 29152

COMMANDER, 60 MAW
TRAVIS AFB, CA 94535

COMMANDANT, AFMTC
LACKLAND AFB, TX 78236

COMMANDER, 47 FTW
LAUGHLIN AFB, TX 78843

COMMANDER, 42 BMW
LORING AFB, ME 04751

COMMANDER, 432 AD
LUKE AFB, AZ 85309

COMMANDER, 341 SMW
MALMSTROM AFB, MT 59402

COMMANDER, 323FTW
MATHER AFB, CA 95655

COMMANDER, 62 MAW
MCCHORD AFB, WA 98438

COMMANDER, 438 MAW
MCGUIRE AFB, NJ 08641

COMMANDER, 347 FTW
MOODY AFB, GA 31699

COMMANDER, 354 TFW
MYRTLE BEACH AFB, SC 29577

COMMANDER, 63 MAW
Norton AFB, CA 92409

COMMANDER, ESMC
PATRICK AFB, FL 32925

COMMANDER, 46 AERODW
PETERSON AFB, CO 80914

COMMANDER, 317 TAW
POPE AFB, NC 28308

COMMANDER, 64 FTW
REESE AFB, TX 79489

COMMANDER, 4 TFW
SEYMOUR JOHNSON AFB, NC 27531

COMMANDANT, STTC
SHEPPARD AFB, TX 76311

COMMANDER, USAFADWC
TYNDALL AFB, FL 32403

SUPERINTENDENT
USAF ACADEMY, CO 80840

COMMANDER, 1 STRAD
VANDENBERG AFB, CA 93437

COMMANDER, 351 SMW
WHITEMAN AFB, MO 65305

COMMANDER, 379 BMW
WURTSMITH AFB, MI 48753

COMMANDER, 71 FTD
VANCE AFB, CA 73702

COMMANDER, 439 TAW
WESTOVER AFB, MA 01022

COMMANDER, 82 FTW
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VITA

Captain Jerry P. Haenisch was born on 4 December 1946 in Chicago, Illinois. He enlisted in the Air Force on 26 September 1966, and worked in the Electrical Power Production career field until June 1978. He is a 1978 summa cum laude graduate of the University of Maryland with a bachelor of science degree in Management. In 1980 he earned a second baccalaureate degree in Industrial Engineering from the University of Illinois. He was commissioned in the USAF through the Airman's Education and Commissioning Program (AECP) on 23 April 1980. Prior to June 1983, when he entered the School of Systems and Logistics, Air Force Institute of Technology, he served as Chief, Industrial Engineering Analysis, and Chief of Energy Management at the US Air Force Academy, Colorado.

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